Innovation Survey

SURVEY QUESTIONNAIRE, 2015

This survey collects information on your enterprise's **innovations and innovation activities** during the three years 2013 to 2015 inclusive.

An **innovation** is the introduction of a new or significantly improved product, process, organisational method, or marketing method by your enterprise.

An innovation must have characteristics or intended uses that are new or which provide a significant improvement over what was previously used or sold by your enterprise.

An innovation need only be new or significantly improved for your enterprise. It could have been originally developed or used by other enterprises or organisations.

Innovation activities include the acquisition of machinery, equipment, buildings, software, and licenses; engineering and development work, feasibility studies, design, training, R&D and marketing when they are specifically undertaken to develop and/or implement a product or process innovation. This includes also all types of R&D consisting of research and development activities to create new knowledge or solve scientific or technical problems.

Sections 3 to 8 cover product and process innovations. Organisational and marketing innovations are covered in sections 9 and 10.

Please complete all questions, unless otherwise instructed.

Person we should contact if there are any queries regarding the form:

Name: _ Job title: _ Organisation: _		
Phone:		
E-mail:		
1. General inf	formation about the enterprise	
Name of enterpr	rise	
Postal code	Main activity	

1.1 In which geographic markets did your enterprise sell goods three years 2013 to 2015?	and/or	service	s during the	
•	Yes	No		
	1	0		
A.Local / regional within Armenia				
B. National (other regions of Armenia)				
C. European Union or associated countries*				
D. All other countries				
Which of these geographic areas was your largest market in terms of turnover during the three years 2013 to 2015? (Give corresponding letter)				
*: Include the following European Union (EU) and associated countries: Albania, Austria, Belgium, Bosnia Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Ireland Luxembourg, FYR Macedonia, Malta, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Ser Spain, Sweden and the United Kingdom.	l, Kosovo,	Latvia, Liecl	ntenstein, Lithuania,	
2. Basic economic information on your enterprise				
2.1 What was your enterprise's total turnover for 2015? (Give turnover in '000 AMD currency units). Turnover is defined as the market sales of goods and services (include all taxes except VAT/for credit institutions: interests receivable and similar income; for Insurance services give gross premiums written).				
2.2 What was your enterprise's average number of employees in 20	15?			
3. Product innovation (good or service)				
A product innovation is the market introduction of a new or significantly improve to its capabilities, user friendliness, components or sub-systems.	ed goo d	l or servi	ce with respect	
 Product innovations (new or improved) must be new to your enterprise, but they do not need to be new to your market. Product innovations could have been originally developed by your enterprise or by other enterprises or organisations. 				
A good is usually a tangible object such as a smart phone, furniture, or packaged software, but downloadable software, music and film are also goods. A service is usually intangible, such as retailing, insurance, educational courses, air travel, consulting, etc.				
3.1 During the three years 2013 to 2015, did your enterprise introduc	e:			
		Yes I	No 0	
Goods innovations: New or significantly improved goods (exclude the simple resale of goods and changes of a solely aesthetic nature)	f new			

Service innovat	tions: New or significantly improved services				
If yes, please indicate the name of the most important one and describe it briefly					
	If no to all options, go				
	Otherwise, go to que	estion 3.2			
3.2 Who deve	eloped these product innovations?				
		Tick all the Goods innovations	hat apply Servi o	ce innovations	5
Your enterprise	by itself				
Your enterprise	together with other enterprises or organisations*				
	e by adapting or modifying goods or services oped by other enterprises or organisations*				
Other enterpris	es or organisations				
	dent enterprises plus other parts of your enterprise group (nclude universities, research institutes, non-profits, etc.	subsidiaries, sister enterpris	ses, head off	fice, etc.).	
3.3 Were any 2015:	y of your product innovations (goods o	r services) during t	he three	years 20	13 to
			Yes	No 0	
New to your market?	Your enterprise introduced a new or significantly in market before your competitors (it may have alread markets)		ur \Box		
Only new to your enterprise?	Your enterprise introduced a new or significantly in already available from your competitors in your ma		S 🗆		
Using the de	finitions above, please give the percent o	of your total turnove	er in 201	5 from:	
New or signification	antly improved products introduced during the three y	ears 2013 to 2015 that w	ere new to		%
New or significanew to your er	antly improved products introduced during the three ynterprise	ears 2013 to 2015 that w	ere only		%
	vere unchanged or only marginally modified during sale of new products purchased from other enterprises	•	2015		%
		Total tu	rnover	1 0 0	%

If yes, please indicate the name of the most important one and describe it briefly

4. Process innovation

A process innovation is the implementation of a **new** or **significantly** improved production process, distribution method, or supporting activity.

- Process innovations must be new to your enterprise, but they do not need to be new to your market.
- The innovation could have been originally developed by your enterprise or by other enterprises or organisations.
- Exclude purely organisational innovations these are covered in section 9.

4.1 During the three years 2013 to 2015, did your enterprise introduce:		
	Yes	No
	1	0
New or significantly improved methods of manufacturing for producing goods or services		
If yes, please indicate the name of the most important method and describe it briefly		
New or significantly improved logistics, delivery or distribution methods for your inputs, goods or services		
If yes, please indicate the name of the most important method and describe it briefly		
New or significantly improved supporting activities for your processes, such as maintenance systems or operations for purchasing, accounting, or computing		
If yes, please indicate the name of the most important process and describe it briefly		
If no to all options, go to section 5		
Otherwise, go to question 4.2		
4.2 Who developed these process innovations?		
	Tick al	ll that apply
Your enterprise by itself		
Your enterprise together with other enterprises or organisations*		
Your enterprise by adapting or modifying processes originally developed by other enterprises or organisations*		
Other enterprises or organisations*		
*: Include independent enterprises plus other parts of your enterprise group (subsidiaries, sister Organisations include universities, research institutes, non-profits, etc.	· enterpi	rises, head office, etc).

5. Ongoing or abandoned innovation activities for product or process innovations

Innovation activities include the acquisition of machinery, equipment, buildings, software, and licenses; engineering and development work, feasibility studies, design, training, R&D and marketing when they are specifically undertaken to develop and/or implement a product or process innovation. This includes also all types of R&D consisting of research and development activities to create new knowledge or solve scientific or technical problems.

did not result in a p	roduct or process innovation because the act	ivities v	vere:			
		Yes	No			
		1	0			
Abandoned or suspende	d before completion					
Still ongoing						
If no t	o all options in questions 3.1, 4.1 and 5.1 go t	o sectio	n 9			
	Otherwise, go to section 6					
6. Activities and exp	enditures for product and process innovat	ions				
6.1 During the three yeactivities:	ears 2013 to 2015, did your enterprise engage	in the f	ollowi	ng in	novatio	n
activities.				Yes 1	No 0	
In-house R&D	Research and development activities undertaken by your create new knowledge or to solve scientific or technical prosoftware development in-house that meets this requirement If yes, did your enterprise perform R&D during the three yes 2015:	oblems (in it)	clude			
	Continuously (your enterprise had permanent R&D state Occasionally (as needed only)	f in-house	e)□1 □2			
External R&D	Your enterprise contracted-out R&D to other enterprises (in enterprises in your own group) or to public or private resea		isations			
Acquisition of machinery, equipment, software & buildings	Acquisition of advanced machinery, equipment, software a be used for new or significantly improved products or products		gs to			
Acquisition of existing knowledge from other enterprises or organisations	Acquisition of existing know-how, copyrighted works, pater patented inventions, etc. from other enterprises or organisa development of new or significantly improved products and	ations for t	the			
Training for innovative activities	In-house or contracted out training for your personnel spec development and/or introduction of new or significantly imp and processes					
Market introduction of innovations	In-house or contracted out activities for the market introduction or significantly improved goods or services, including mark launch advertising	•				
Design	In-house or contracted out activities to alter the shape, apusability of goods or services	pearance	or			
Other	Other in-house or contracted out activities to implement ne improved products and processes such as feasibility studie tooling up, industrial engineering, etc.	•	•			

6.2 How much did your enterprise spend on each of the following innovation activities in 2015 only? Innovation activities are defined in question 6.1 above. Include current expenditures (including labour costs, contracted-out activities, and other related costs) as well as capital expenditures on buildings and equipment. (Give expenditure data in 000's AMD)

	Please estimate if	vou lack	precise	accounting	data
--	--------------------	----------	---------	------------	------

	External R&D					
	Acquisition of machinery, equipment, software & building (Exclude expenditures on these items that are for R&D)	js .				
	Acquisition of existing knowledge from other enterprises	or organis	ations			
	All other innovation activities including design, training, relevant activities	marketing,	and other			
	Total of the above innovation activities					
7. P	ublic financial support for innovation activit	ies				
ir	During the three years 2013 to 2015, did your ennovation activities? Include financial support via tax cuarantees. Exclude R&D and other innovation activities conduction.	redits or de	eductions, g	rants, subsi	dised loans	s, and loan
				١	res No	
					1 0	
						I
governi	ublic sector includes government owned organisations such as local, region ment providers of services such as security, transport, housing, energy, etc. o-operation for product and process innova			ns and agenci	ies, schools, l	nospitals, and
0. C	o-operation for product and process innova	lion acti	VILICS			
a of	Ouring the three years 2013 to 2015, did your enterctivities with other enterprises or organisation there enterprises or organisations on innovation activities. Both the contracting out of work with no active co-operation. No \(\sum (Go \text{ to section 9}) \)	ns? Innova	ation co-ope	ration is a	ctive partici	pation with
	Yes \Box (Go to question 8.2)					
8.2 F	Please indicate the type of innovation co-operati	on partne	er by loca	ition	(Tick a	ll that apply)
Туре	of co-operation partner	Armenia	Europe*	United States	China or India	All other countries
A. Oth	ner enterprises within your enterprise group					
B . Su	ppliers of equipment, materials, components, or software					
C. Clie	ents or customers from the private sector					
D. Clie	ents or customers from the public sector					
E. Co	mpetitors or other enterprises in your sector**					
F. Co	nsultants or commercial labs					
G . Un	iversities or other higher education institutes					
H . Go	vernment, public or private research institutes					

In-house R&D (Include current expenditures including labour costs and capital expenditures on buildings and equipment specifically for R&D)

*:Include the following European Union (EU) and associated countries: Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Ireland, Kosovo, Latvia, Liechtenstein, Lithuania, Luxembourg, FYR Macedonia, Malta, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Slovakia, Switzerland, Turkey, Spain, Sweden and the United Kingdom.

** It is a question about innovation co-operation partners and one of possibilities can be partner from the same sector (NACE activity group) like a responsible enterprise. For example Coca-Cola and Pepsi are competitors, but can work together to creating environmental innovation

8.3	8 Which type	of co-opera	tion partn	er (8.2) v	was the	most	valuable	for your	enterprise's	innovation
	activities? (Give corres	ponding le	etter)						

9. Organisational Innovation

An organisational innovation is a new organisational method in your enterprise's business practices (including knowledge management), workplace organisation or external relations that has not been previously used by your enterprise.

- It must be the result of strategic decisions taken by management.
- Exclude mergers or acquisitions, even if for the first time.

9.1 During the three years 2013 to 2015, did your enterprise introduce:

	Yes 1	No 0
New business practices for organising procedures (i.e.first time use of supply chain management*, business re-engineering, knowledge management, lean production**, quality management, etc.)		
New methods of organising work responsibilities and decision making (i.e. first time use of a new system of employee responsibilities, team work, decentralisation, integration or de-integration of departments, education/training systems, etc.)		
New methods of organising external relations with other enterprises or public organisations (i.e. first time use of alliances, partnerships, outsourcing or sub-contracting, etc.)		

- 1. Eliminate waste
- 2. Minimize inventory
- 3. Maximize flow
- 4. Pull production from customer demand
- 5. Meet customer requirements
- 6. Do it right the first time
- 7. Empower workers
- 8. Design for rapid changeover
- 9. Partner with suppliers
- 10. Create a culture of continuous improvement

^{*} Supply chain management (SCM) is the management of the flow of goods and services. It is the active management of supply chain activities to maximize customer value and achieve a sustainable competitive advantage. Currently SCM are known as the software. There are two main types of SCM software: planning applications and execution applications. Planning applications use advanced algorithms to determine the best way to fill an order. Execution applications track the physical status of goods, the management of materials, and financial information involving all parties.

^{**} Lean Manufacturing is a theory that you can reduce waste, and keep your people, equipment, and workspace responsive to what's needed right now. Lean production is an assembly-line methodology. It is also known as the Toyota Production System or just-in-time production. Main principles:

10. Marketing innovation

A marketing innovation is the implementation of a new marketing concept or strategy that differs significantly from your enterprise's existing marketing methods and which has not been used before.

- It requires significant changes in product design or packaging, product placement, product promotion or pricing.
- Exclude seasonal, regular and other routine changes in marketing methods.

10.1 During the three years 2013 to 2015, did your enterprise introduce:

	1	0
Significant changes to the aesthetic design or packaging of a good or service (exclude changes that alter the product's functional or user characteristics – these are product innovations)		
New media or techniques for product promotion (i.e. first time use of a new advertising media, a new brand image, introduction of loyalty cards, etc.)		
New methods for product placement or sales channels (i.e. first time use of franchising or distribution licenses, direct selling, exclusive retailing, new concepts for product presentation, etc.)		
New methods of pricing goods or services (i.e. first time use of variable pricing by demand, discount systems, etc.)		

If 'no' to all options in questions 3.1, 4.1, 5.1, 9.1 and 10.1 go to section 13

Otherwise go to section 11

11. Factors hampering product and process innovation activities

11.1 During the three years 2013 to 2015, how important were the following factors in preventing your enterprise from innovating or in hampering your innovation activities?

Degree of importance

Vaa Na

		High	Medium	Low	Factor not experienced
		3	2	1	0
01	Lack of funds within your enterprise or group				
Cost factors	Lack of finance from sources outside your enterprise				
1401010	Innovation costs too high				
Knowlodgo	Lack of qualified personnel				
Knowledge factors	Lack of information on technology				
	Lack of information on markets				
	Difficulty in finding cooperation partners for innovation				
Market	Market dominated by established enterprises				
factors	Uncertain demand for innovative goods or services				
Reasons	No need due to prior innovations by your enterprise				
not to innovate	No need because of no demand for innovations				

Section 12 refers to enterprises that have introduced/implemented innovation ('yes' to questions 3.1, 4.1, 9.1 and 10.1)

12. Innovations with environmental benefits

An innovation with environmental benefits is a new or significantly improved product (good or service), process, organisational method or marketing method that creates environmental benefits compared to alternatives.

- The environmental benefits can be the primary objective of the innovation or a by-product of other objectives.
- The environmental benefits of an innovation can occur during the production of a good or service, or during its
 consumption or use by the end user of a product. The end user can be an individual, another enterprise, the
 Government, etc.

12.1	I During the three years 2013 to 2015, did your enterprise introduce a product (good or
	service), process, organisational or marketing innovation with any of the following
	environmental benefits?

	Yes	No	
Environmental benefits obtained within your enterprise	1	0	
Reduced material or water use per unit of output			
Reduced energy use or CO ₂ 'footprint' (reduce total CO ₂ production)			
Reduced air, water, noise or soil pollution			
Replaced a share of materials with less polluting or hazardous substitutes			
Replaced a share of fossil energy with renewable energy sources			
Recycled waste, water, or materials for own use or sale			
Environmental benefits obtained during the consumption or use	of a good or	service <u>by the</u>	end user
Reduced energy use or CO ₂ 'footprint'			
Reduced air, water, noise or soil pollution			
Facilitated recycling of product after use			
Extended product life through longer-lasting, more durable products			

12.2 During 2013 to 2015, how important were the following factors in driving your enterprise's decisions to introduce innovations with environmental benefits?

	Degree of importance			
	High	Medium	Low	Not relevant
	3	2	1	0
Existing environmental regulations				
Existing environmental taxes, charges or fees				
Environmental regulations or taxes expected in the future				
Government grants, subsidies or other financial incentives for environmental innovations				
Current or expected market demand for environmental innovations				
Improving your enterprise's reputation				
Voluntary actions or initiatives for environmental good practice within your sector				
High cost of energy, water or materials				
Need to meet requirements for public procurement contracts				

Only answer section13 if your enterprise did <u>not</u> introduce an innovation and did not have ongoing/abandoned innovation activities during the three years 2013 to 2015 ('no' to all options in questions 3.1, 4.1, 5.1, 9.1 and 10.1).

13. Non-innovators						
13.1 Which of the following best describes why during the three years from 2013 to 2015:	your ento	erprise ł	nad no i	nnovat	ion activities	
	Tick one or	nlv				
No compelling reason to innovate		•	to 13.2			
Considered innovating, but barriers to innovation too large		Go	Go to 13.3			
13.2 How important were the following reasons for activities during 2013 to 2015?	r your ent	erprise ı	not to co	onduct	innovation	
activities during 2013 to 2013?			Degree of importance			
					Not	
		High 3	Medium	Low	important	
		_	2	1	0	
Low demand for innovations in your market						
No need to innovate due to previous innovations						
No need to innovate due to very little competition in your enterpr	ise's market					
Lack of good ideas for innovations						
13.3 How important to your enterprise were the fol 2015?	llowing ba	arriers to	o innova	tion du	ring 2013 to	
		Degree o	Degree of importance			
			_	Not		
	High	Medium		importan	t	
	3	2	1	0		
Lack of internal finance for innovation						
Lack of credit or private equity						
Lack of skilled employees within your enterprise						
Difficulties in obtaining government grants or subsidies for innovation						
Lack of collaboration partners						
Uncertain market demand for your ideas for innovations						

Too much competition in your market

Lack of information on technology

Lack of information on markets