

## Title in English

Innovation and Technology Transfer Projects

## Full name in national language

Proiecte de inovare și transfer tehnologic

## Keywords

Technology Transfer, Innovation, Technology Development, Prototyping

## Overview (nature, main goals)

The support measure **Innovation and Technology Transfer Projects**

aims to stimulate the application of research results and new technologies and their usage by public and private organisations. The measure shall especially facilitate their transfer to the business sector. Annual calls for innovation and technology transfer projects are launched by the [Moldovan Agency for Innovation and Technology Transfer \(AITT\)](#). Projects are selected competitively and supported for a two-year period. Public and not for profit research organisations as well as companies are funded in this measure, whereby 50% of the project cost must be co-funded either in cash or in-kind.

Innovation and Technology Transfer Projects should facilitate the implementation and transfer to business of research results, inventions, new technologies, equipment, agricultural varieties, pharmaceuticals, and other intellectual property.

## Background and rationale

The [Moldovan Agency for Innovation and Technology Transfer \(AITT\)](#)

was established in 2004 for coordinating, stimulating and implementing technology transfer and innovation activities in the Republic of Moldova. It is part of the [Moldovan Academy of Sciences \(ASM\)](#). AITT shall provide a link between scientists on the one hand and the public authorities and business on the other hand. One of its main competitive funding tools is the annual call for Innovation and Technology Transfer Projects. This call has been implemented since 2005.

The creation of the AITT as well as the introduction of the funding instrument Innovation and Technology Transfer Projects was inspired by trans-national policy learning. When R&D and innovation funding were reformed in 2004 and the Agency as well as the funding instrument was established from scratch, good practice examples in support of innovation and technology transfer were studied in EU Member States as well as in the USA. Moreover, support for technology transfer is cited by the AITT as an element in the process of bringing Moldova closer to the EU.

Innovation and technology transfer projects were introduced to stimulate the transfer of research results generated within the Academy of Sciences or other R&D institutes especially to business, but also for usage and uptake by other public or private non-profit organisations (e.g. research institutions). The measure addresses a fundamental problem of post-communist economies in countries of the Former Soviet Union: after the dissolution of the Soviet Union, companies reduced drastically their R&D activities and investment, and academic and other public R&D institutes got disconnected from the application of their R&D in the business sphere. Previously major research intensive companies (such as within the military-industrial complex) lost most of their scientific potential in terms of personnel and know-how. After Moldova became independent, overall R&D investment was reduced from levels close to 3% of GDP to 0.2% of GDP in the early 2000's. Studies of the Moldovan S&T system show that industrial research expenditures have declined from almost one third of the total R&D investment in 1990 to about 2% in 1997. At the same time the R&D personnel has declined from 25,200 in 1990 to around a fifth of this level 20 years later.

## Policy Priorities

The following policy priorities are targeted:

### Main policy

/system/categories/List\_of\_Policy\_Priorities/Research\_and\_Technologies/Science-Industry\_linkages/R\_D\_cooperation

## Other policy priorities

- 2.2.2 Knowledge Transfer (contract research, licences, research and IPR issues in public/academic/non-profit institutes)

## Targeting specific sector

- 0. No specific sector

## Selected Targeted research and technology fields

- Biotechnology
- Energy
- Environment
- Food agriculture and fisheries
- Health
- ICT
- Materials
- Nanosciences and nanotechnologies
- Services
- Transport

## Addressing Lisbon guidelines

- Improvements in innovation support services, in particular for dissemination and technology transfer.

## Start date

2005

## Expected ending

No end date planned

## Novel Measure

- Yes

## Replacing existing measures

## Novel description

- Inspired by national policy debate

## Inspired by

The measure was inspired by a general reorientation of R&D and innovation funding in Moldovain 2004-2005. Competitive funding of R&D and innovation was strengthened at that time at the expense of block grant (institutional) funding. Good practice in R&D and innovation funding in EU member states was studied for this purpose and contributed to introducing this measure.

## Geographic coverage

The measure covers the whole country.

## Targets or beneficiaries

- All companies
- Higher educations institutions research units/centres
- Other non-profit research organisations (not HEI)
- Technology and innovation centres (non-profit)

## Elegible for funding

- Higher education institutions research units/centres
- Other non-profit research organisations (not HEI)
- Technology and innovation centres (non-profit)

## If more than one

- Other: The programme aims at stimulating cooperation between research organisations and companies for the implementation of research results and new technologies. Co-operation is mandatory in Technology Transfer Projects. Co-operation is required between research organisations and users of innovations, which are either other research organisations or, as in most cases, companies. Co-funding of at least 50% of the overall project cost is required from extra budgetary sources. Co-funding is de-facto provided in most cases by companies, although own resources of research organisations may also be calculated.

## Aspect of innovation process addressed by the measure

### Type of Research Activities targeted

#### structure of the measure

Support of Technology Transfer Projects is regulated in the partnership agreement between the Moldovan Government and the Academy of Sciences for the years 2009-2012, especially in chapter VI. Funding of Innovation Activities and Technology Transfer.

[AITT](#)

, which institutionally speaking is part of the Academy of Sciences. [AITT](#)

#### Sub-measure structure

#### Management structure

The [AITT](#)

is responsible for the implementation of the measure. Within the AITT, the Department for Technology Transfer supervises the activities within the funded projects and it monitors also the compliance with the co-funding requirement.

The funding for the support measure is provided through [the Supreme Council for Science and Technological Development \(SCSTD\)](#) of the Academy of Sciences (ASM). The volume of financial allocations from the state budget for Innovation and Technology Transfer Projects is fixed in the Annual Protocol to the Partnership Agreement between the ASM and the Government.

After adoption of the Annual Protocol, AITT has to sign within one month the contracts on innovation and technology transfer projects for the respective year. The conditions of implementation and funding are stipulated in the contracts.

#### Review of progress

Regular reporting over the two year period of project implementation is required and has to be provided to the Agency for Innovation and Technology Transfer. Project leaders have to prepare a report on the results of R&D and innovation activities annually or at the completion of an intermediate stage. Reports have to be submitted to the AITT for evaluation and approval. The materials, which have to be presented to AITT include:

1. Report on the work performed and results obtained;
2. Annexes in the form of technical documentation, certificates, photographs, samples;
3. Information about the use of finances;
4. a document confirming the co-financing of the project..

The Supreme Council for Science and Technological Development (SCSTD) of ASM approves annually the work of AITT on coordination of innovation and technology transfer projects.

#### Selection criteria

The main eligibility criterion is availability of co-financing (of at least 50%) of an innovation and technology transfer project.

The following evaluation criteria are also applied:

- correspondence of the objectives and results of investigations of programme / project to the strategic directions of science and innovation;
- the scientific level of the proposed project, the competitiveness of planned results;
- scientific objectives;
- applicability and economic potential of the results;
- composition of the project team, including participation of young scientists;
- competence of personnel;
- material and technological basis of the involved organisations;
- project management;
- social and economic effects of project implementation.

These criteria apply not only for innovation and technology transfer projects, but also for state R&D programmes. Project assessment according to the same set of criteria for both measures is fixed in the partnership agreement between the Academy of Sciences and the government.

But besides these general criteria, for innovation and technology transfer projects the following specific criteria also apply:

- At what stage is the invention: the existence of patents and experimental samples, technical documentation, etc., how much work is still necessary to fully implement the innovation;
- How will technology transfer take place and at which institution/company;
- Concrete results to be achieved within the project (documentation, facility, product, service ...);
- Viability of the invention (market absorption capacity, feasibility, business plan for industrial implementation, profitability etc.)

## Openness to EU

Not applicable

## Openness to third

Not applicable

## Selection process of projects / participants

Annual calls for proposals with fixed submission deadlines are launched for the Innovation and Technology Transfer Projects. Project proposals have to be submitted within 30 days of publication of the call. The evaluation and selection for funding of proposals is regulated and performed according to Annex 4 on expertise of programmes / projects of the Partnership Agreement between the Moldovan Government and the Academy of Sciences.

Evaluation of project proposals is carried out under the auspices of the ASM Consultative Council for expertise. National Moldovan experts evaluate projects through an online system by awarding points. The conclusion of the ASM Consultative Council for expertise on a project must include the strengths and weaknesses, and reasons for recommendation or rejection of funding. After the expertise, AITT analyses these results and draws up the list of projects proposed for funding.

This list is transmitted to the Supreme Council for Science and Technological Development (SCSTD), an executive body of the ASM, which examines and approves projects for funding. Projects financed from the state budget are included in the State Register of science and innovation projects and are published in the Official Monitor of the Republic of Moldova.

The selection procedure is similar for Innovation and Technology Transfer Projects as well as for state R&D programmes, as the same regulatory basis applies for both support measures.

## What State Aid framework is applied to the measure?

n/a

## In what form is funding provided?

- Grants

## What are the eligible costs, where direct funding is provided?

- Equipment
- External expertise (consultants, studies, etc.)
- Labour costs (including overheads)
- Training (including study trips)
- Other: travel costs

## Sources of financing (other than national public sources of funding)

- Co-financed by foundations or charities
- Co-financed by the private sector
- Other: extra-budgetary sources of the Academy of Sciences, universities and public institutions, e.g. sources from rent, contracts etc.

## Overall budget in EUR

EUR1.7m (2005-2009)

## Exchange rate used

1EUR = 16Lei

## Overall budget in national currency

MDL27.1m

## Year

## Further Information

Grants for Innovation and Technology Transfer Projects have to be co-financed. At least 50% of the project cost has to be provided from private resources (usually business) or extra-budgetary resources of research organisations. Co-funding can be provided in cash or through the provision of material and equipment.

## Ex-ante Indicators

- No

## On-going/Mid-term

- Yes

## Final/Ex-post

- No

## If the programme was evaluated, what were the main findings?

At the end of each year SCSTD together with AITT organises hearings and discussions on innovation and technology transfer projects. Reports are presented by project leaders of the projects. Results of these hearings are not published.

AITT has made available some annual reports, which promote especially the achievements of funded projects, but which do not assess the effectiveness of the entire measure.

In 2009, the Department of Technology Transfer of AITT organised a technological audit of applied research projects, funded by the state in the years 2005-2008. Meetings with scientists from 20 institutions in science and innovation were held for this audit.

According to a specific questionnaire project results, methods of implementation, and problems in achieving technologies / products were recorded. No report was published of this analysis, but the AITT database of inventions and technologies was updated and complemented with project information ([http://www.aitt.md/oferta\\_list&language=en](http://www.aitt.md/oferta_list&language=en)

).

It is difficult to assess the impact of the measure as there is no public report which analyses or presents achieved results in aggregated form.

## If no official evaluation has been undertaken is there any evidence

## which allows an appraisal of the success of the measure?

The impact of the measure Technology Transfer Projects is limited by the modest public budget available for the programme and by problems to attract project partners and funding from the private sector for cooperation with research institutions. Co-funding from industry and in general R&D funding from the private sector are still rather limited. In addition there is no clear mechanism that regulates how benefits and intellectual property rights of authors are shared, in case of co-financing from the private sector.

The following overview presents data on projects submitted versus projects selected for funding:

year	projects submitted	projects funded
2005	44	6
2006	71	27
2007	70	16
2008	46	21
2009	57	30

Obviously the success rate has increased significantly in 2008 as compared to previous years; nearly 50% of submitted projects were selected for funding in 2008 and 2009.

In the period 2005-2008 most projects were funded in the field of agricultural biotechnology, soil fertility and food security. Significantly less funding went to projects in the fields of energy efficiency, energy supply and renewable energies, and in third place biomedicine, pharmaceuticals, health/medicine.

## Results

Project results are presented and promoted via the website of the [Agency for Innovation and Technology Transfer](#)

## Further development

The programme is continuing as such. In 2006 new innovation support tools have been established in the form of ?technoparks? and incubators, which are complementary to this programme.

## Website

[http://www.aitt.md/concurs\\_list&language=md](http://www.aitt.md/concurs_list&language=md)

## English language website

<http://www.aitt.md/node/135>

## Legal

Regulation on the organisation and implementation of the competition of state programmes, and of innovation and technology transfer programmes (annex 3 to the Partnership Agreement between the Government and the Academy of Sciences, approved by Decision of Government No. 27 of 22.01.2009) - <http://lex.justice.md/index.php?action=view&view=doc?=1&id=330544>

## Agency Administering

[Agency for Innovation and Technology Transfer \(AITT\)](#)

## Funding Agency

[Academy of Sciences of Moldova \(ASM\)](#)

## Manager(s) responsible for the measure

[Agency for Innovation and Technology Transfer \(AITT\)](#)

## Last update

20/07/2011