

MEETING WITH EUROPEAN COMMISSION FOR THE EUROPEAN UNION FUNDS' INVESTMENTS IN 2021–2027

1st policy objective “A smarter Europe – innovative
and smart economic transformation”



MINISTRY
OF EDUCATION,
SCIENCE
AND SPORT
OF THE REPUBLIC OF LITHUANIA



2019-06-27

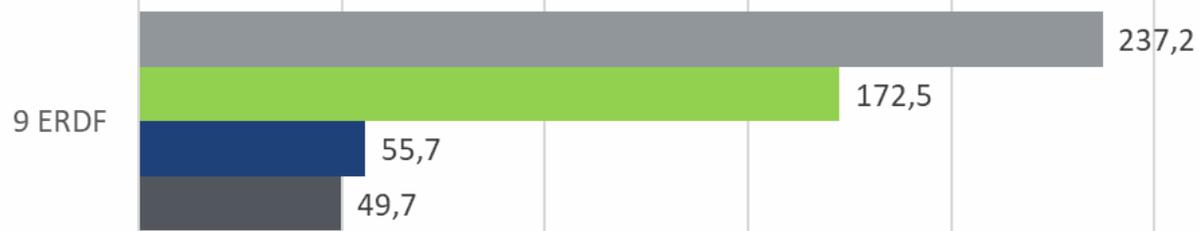
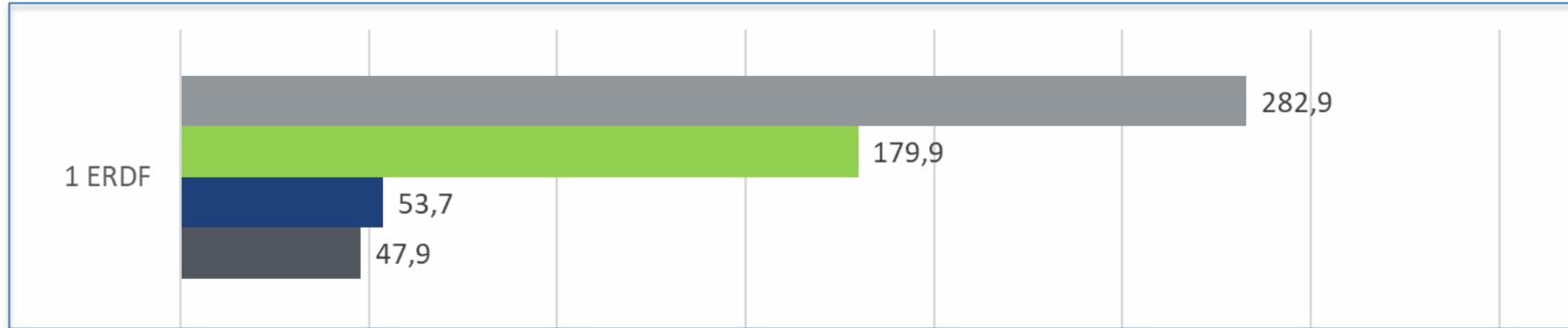
References for 2021-2027 investments in Lithuania

- Country Report - Lithuania (2019);
- National progress programme (project);
- EC (2019), 100 Radical Innovation Breakthroughs for the future;
- OECD (2019), University-Industry Collaboration;
- OECD Science, Technology and Innovation Outlook 2018;
- OECD (2013), Supporting Investment in Knowledge Capital, Growth and Innovation.



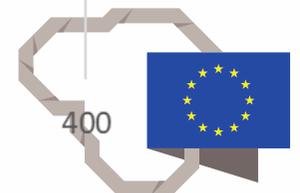
OP 2014-2020 progress review

Mln. Eur

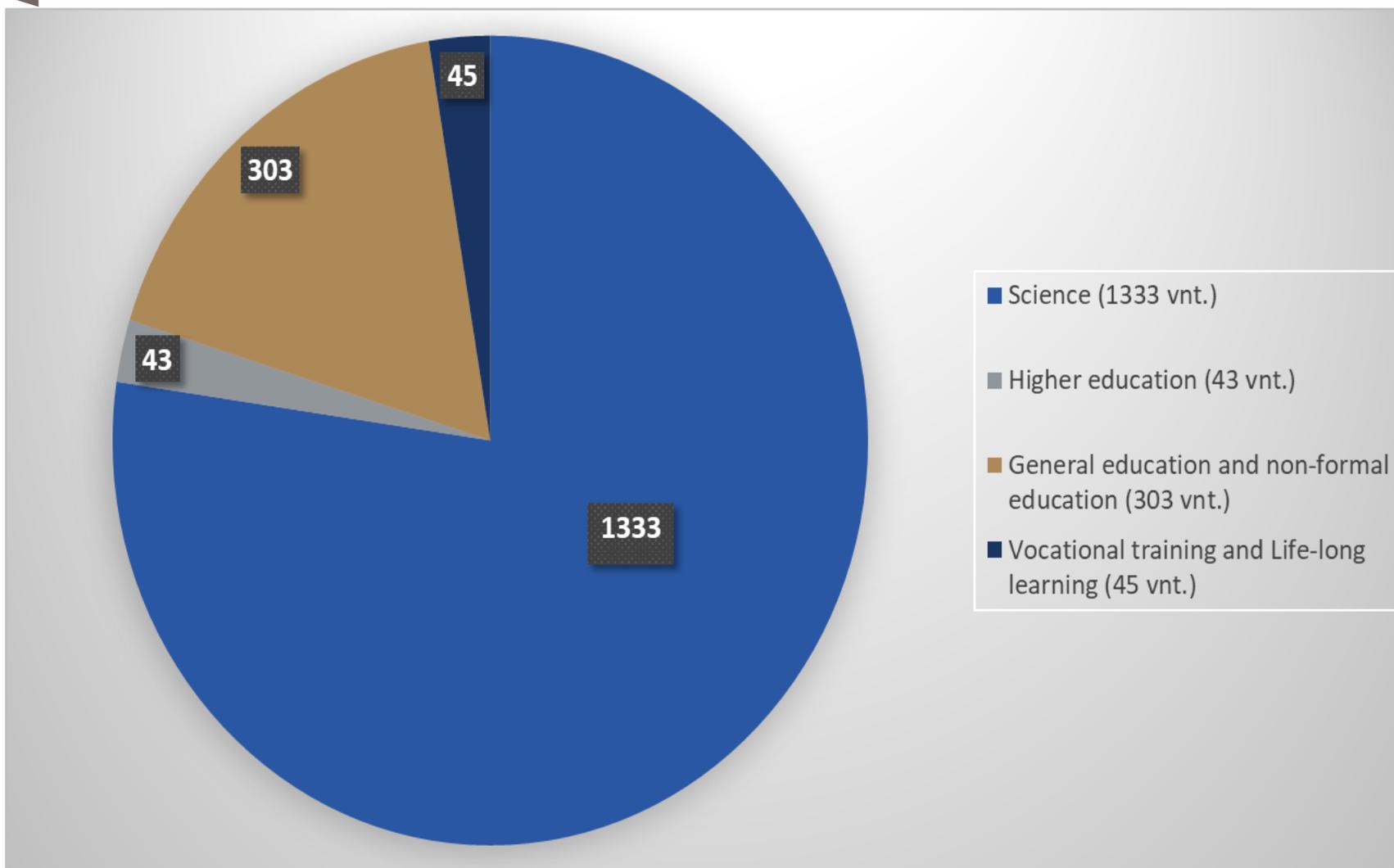


0 50 100 150 200 250 300 350 400

■ Total amount ■ Contracted amount ■ Paid amount ■ Eligible amount



Number of contracts signed (state planning, regional planning and competitive)



Priority 1, ERDF : 96 contracts signed (19 contracts of state planning)



General challenges in 2014-2020 period

- Project level: the lack of management capacities; administrative burden; problems due to state aid issues; financial issues for projects (like taking bank loans etc.); project level solutions exceed technical documentation/plans.
- Institutional level: complicated procedures and changes in it during the period; long planning processes (from idea to signed contract); the impact of implemented reforms.



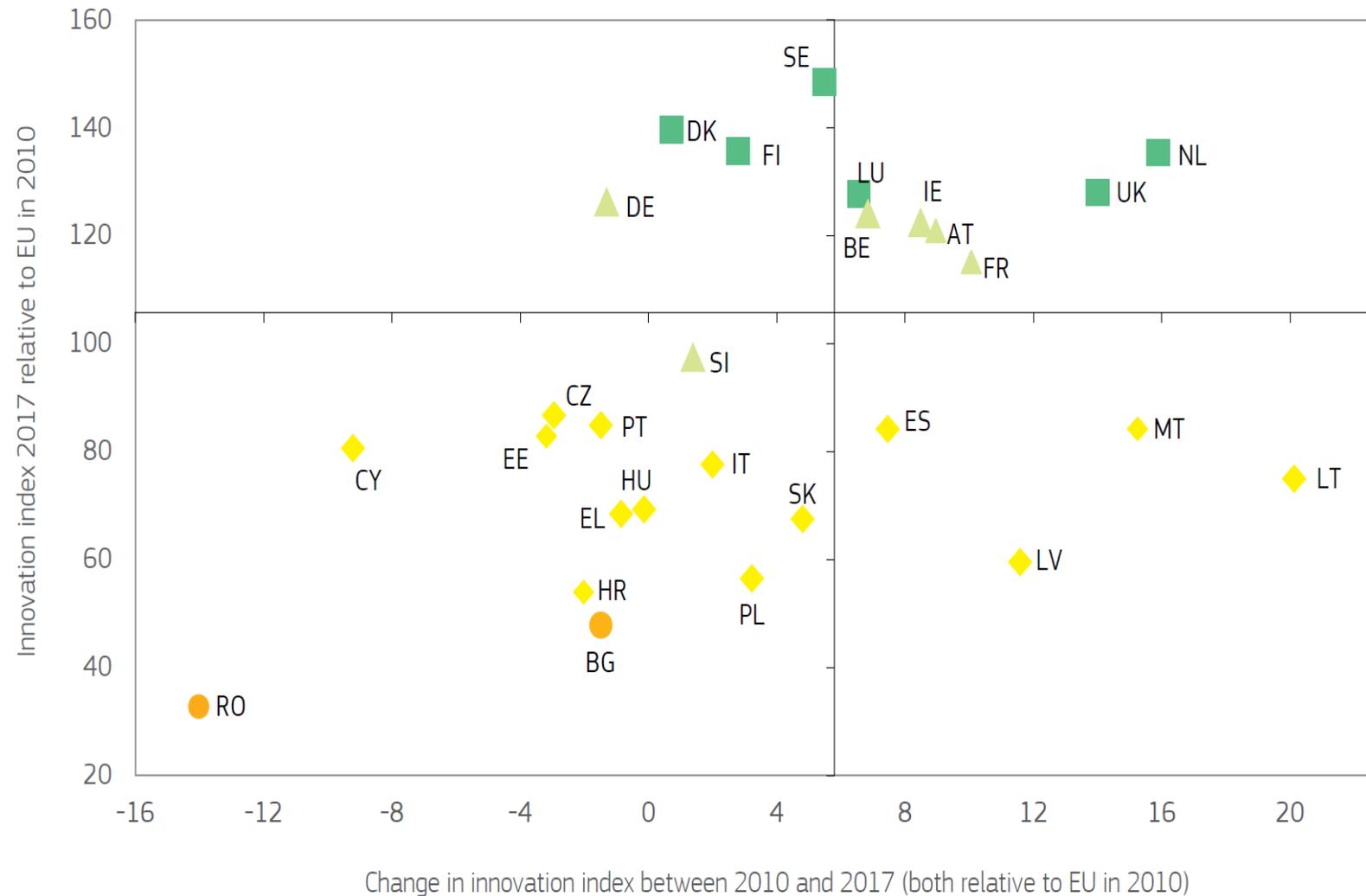
Lithuania's progress in RDI (based on the European Innovation Scoreboard)

Based on the European Innovation Scoreboard Report 2018,

Lithuania's progress in RDI in 2010-2017 is the biggest throughout the EU.

Lithuania's progress - 20.1%
The EU average is 5.8%

Not a regional tendency:
Latvia's progress - 11.2%
however, the overall estimate of Estonia's performance fell by 3.2%



Quality of science and internationality (comparison of the results of several scientific indicators EIS 2017 and EIS 2018)

- The number of Lithuanian authors' scientific articles among the most cited publications has **increased by 10 percent**
- The number of articles published together with foreign authors **increased by 12 percent**
- The share of scientific publications in cooperation with business **increased by 5 percent**
- Number of foreign doctoral students studying in Lithuania **increased by 15 percent**



What is important in new programming period (considering science)?

- To strengthen **Lithuania's participation in Horizon Europe**
- To finish **implementation of higher education reform**
- **Strengthen Lithuania's participation in the European Research Area (ERA)** (develop and implement a national action plan for the implementation of ERA priorities)
- **To strengthen cooperation of Baltic States:**
 - activating joint participation in international programs and initiatives
 - mutual support for countries' positions at EU policy level, the Council of the Baltic Sea States and in other formats
 - more coordination of science policy issues



LT challenges in R&D

Intellectual potential:

- **Talents – raising, keeping, and attracting**
- **Efficient knowledge transfer**

Business R&D-absorptive capacities:

- Increasing R&D-intensive business – spin-offs, start-ups
 - Joint activities between business and universities, research institutes
- (also fostering collaboration between public sector and universities, research institutes)

Financial sources:

- Increasing national funding for R&D – eliminating the dependence on ESIF
- Enlarging the share of business investments into R&D

International collaboration:

- Increase participation in Horizon2020/Horizon Europe
- Need of more effective science diplomacy net



Some examples of current LT actions towards...

Attractive research system

National funds:

- **83 % increase of monthly doctoral scholarship:** starting from 2019 doctoral scholarship for initial years of studies is 722 Eur (formerly 395 Eur) and for the second to fourth year doctoral candidates - 836 Eur (in 2018 - 456 Eur).
- **40 % higher funding for wages of researchers and lecturers** (comparing 2019 and 2017):
 - in 2018 additional 23 mEur or 20 % increase;
 - in 2019 additional 22.9 mEur and 16 % increase from 2018.

EU funds:

- **implementation of the programme “Attracting Foreign Researchers for Research Implementation”**

Strengthening of science & business cooperation

National funds:

- **implementation of Industrial doctorate** (in Lithuania only 29 % of all researchers (counting „full-time equivalent“) are working in the private sector, EU average – 51 %);
- **new two-stage system for universities and research institutes assessment and thereby funding** focusing more on:
 - science-business cooperation;
 - social and economic impact of R&D;
 - activities related to international R&D programmes.

EU funds:

- **promotion of innovation and technology transfer centres and competence centres** to test R&D-based, commercially-promising ideas, create a follow-up investment or other outcome that can be tailored to market deployment.



What main goals / changes Lithuania wants to achieve by 2030 in the sectors, covered by PO1?

National progress programme:

- To improve favourable conditions for high level R&D&I;
- An increase of scientific knowledge that enhances the country's competitiveness;
- To ensure openness and accessibility of scientific results;
- To create a culture of entrepreneurship in research and strengthen its impact on the socio-economic development of the country.

Key science systems trends and issues (OECD):

- the re-orientation of public science agendas towards “grand societal challenges”, with a growing emphasis on the SDGs as a framework for agenda-setting;
- the turn towards more challenge-driven public research, placing more emphasis on interdisciplinary research and the interfaces between basic and applied research;
- emerging new arrangements for commercialising public R&D, including new TTO-type structures and the use of smarter IP strategies in public research performing organisations;
- greater consideration of the ethical, legal and societal aspects of research, within a framework of “responsible research and innovation”



Problems → Recommendations → Goals

| Problems | EC recommendations (Annex D) | Goals of the Ministry |
|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Insufficient use of knowledge which is created | <ul style="list-style-type: none"> develop universities' and research institutions' capacity to improve the commercial viability and market relevance of their research projects; increase the number of innovative firms in the smart specialisation sectors with the highest potential, and taking into account regional specialisations; | to create culture of entrepreneurship in science, strengthening its impact on the socio-economic development of the country |
| Lack of new scientific knowledge in order to increase country's competitiveness | <ul style="list-style-type: none"> support collaborative research between universities and businesses, thereby enabling technology transfer and commercialisation of research outcomes. | to create new knowledge of science in order to increase competitiveness of the country |
| Unattractive career for researchers | <ul style="list-style-type: none"> The development of skills for smart specialisation, skills for key enabling technologies, industrial transition, sectorial cooperation on skills and entrepreneurship, the training of researchers <..>: | to develop, retain and attract talents for creation of high-level science and science-based innovation |
| Insufficient conditons to implement RDI | <ul style="list-style-type: none"> strengthen the supply side of research and innovation by increasing the attractiveness and competitiveness of the research system; | to create beneficial conditions for high level RDI |

„A smarter Europe – innovative and smart economic transformation” in the field of research and innovation **(1.1 specific objective) I**

SO „Enhancing research and innovation capacities and the uptake of advanced technologies“:

1. Goal: to create beneficial conditions for high level RDI.

Planned activities:

1.1. Renewal of R&D infrastructure and development/upgrading of infrastructure for experimental development activities (technological, testing, test production equipment, etc.) in institutions of science and studies including:

- development of centers of competence, RDI demonstration spaces;
- development of research and technology organizations (RTO);
- development of high-tech infrastructure and pilot lines;
- development of pre-incubation and incubation and science-driven business accelerators.

1.2. Ensuring interaction of national and international R&D infrastructures by connecting to international networks.



„**A smarter Europe** – innovative and smart economic transformation” in the field of research and innovation **(1.1 specific objective) II**

Suggested indicators:

- Number of researchers working on improved (funded) research infrastructures;
- Number of international R&D infrastructures in which Lithuania is a member;
- Nominal value of R&D equipment.



„**A smarter Europe** – innovative and smart economic transformation” in the field of research and innovation **(1.1 specific objective) III**

2. Goal: to create new knowledge of science in order to increase competitiveness of the country.

Planned activities:

2.1. Promotion of **high-level R&D activities;**

2.2. **International R&D projects**, including funding for projects that are well rated in international programs but have not received funding;

2.3. Promotion of **centres of competence;**

2.4. Promotion of **centres of excellence;**

2.5. Promotion of **research and technology organizations (RTOs);**

2.6. **R&D activities focused on solution of social challenges and business needs** and the development of **new products / technologies;**

2.7. Promotion of **participation in international science and innovation programs** (such as Horizon Europe, Eureka, Cost and Baltic sea region programmes and others);

2.8. **Attraction of foreign scientists to carry out R&D activities** focused on the commercialization of knowledge.



„**A smarter Europe** – innovative and smart economic transformation” in the field of research and innovation **(1.1 specific objective) IV**

Suggested indicators:

- Applications of patents supplied to the European Patent Office;
- Applications of trademark and design.



Is there a possibility for finance from [Priority 1, ESF SO?](#)

SO: The development of skills for smart specialisation, skills for key enabling technologies, industrial transition, sectorial cooperation on skills and entrepreneurship, the training of researchers <..>:

Task: to develop, retain and attract talents for creation of high-level science and science-based innovation.

- **Planned activities:** attracting students to implement R&D activities; doctoral studies; post-graduate internships; networking, science management, including cultural change in institutions; science communication (promotion); development of international mobility programs; strengthening the network of national contact points for international science and innovation programs, etc.



„A smarter Europe - innovative and smart economic transformation” in the field of digitisation for citizens, companies and governments **(1.2 specific objective)**

SO „Reaping the benefits of digitisation for citizens, companies and governments“:

1. Goal: to ensure openness and accessibility of scientific results.

Planned activities:

1.1. Investments in the development of **electronic infrastructures required for the implementation of R&D and the accessibility to electronic resources;**

1.2. **Integration to the European Cloud of Open Science.**

Suggested indicator:

- Users that have used digital services.



“A smarter Europe – innovative and smart economic transformation” in the field of skills for smart specialisation, industrial transition and entrepreneurship **(1.4 specific objective) I**

SO „Developing skills for smart specialisation, industrial transition and entrepreneurship“:

1. Goal: to create culture of entrepreneurship in science, strengthening its impact on the socio-economic development of the country.

Planned activities:

1.1. Strengthening commercialization of R&D results through promotion of the **establishment and activities of spin-offs;**

1.2. Implementing **entrepreneurship principles in research and studies institutions;**

1.3. Establishment of a system of **use of R&D knowledge in the public sector;**

1.4. Strengthening **science and innovation management competencies** in research and studies institutions (promotion of **activities in technology transfer centres**) and science policy-making institutions;

1.5. **Initiates for doctoral studies with business, researchers in business, contact missions** in order **promote cross-sectoral mobility skills of researchers;**

1.6. Strengthening commercialization of R&D results through promotion of **joint science-business, science-public R&D projects.**



“A smarter Europe – innovative and smart economic transformation” in the field of skills for smart specialisation, industrial transition and entrepreneurship **(1.4 specific objective) II**

Suggested indicators:

- Investment in ecosystems for skills development;
- Number of enterprises receiving subsidies;
- Number of R&D institutions participating in joint projects;
- Number of enterprises cooperating with R&D institutions;
- Applications of patents supplied to the European Patent Office;
- Applications of trademark and design;
- Total number of private-public (science-business) publications.

