



Executive Summary of ALIPRO National Report Poland

ALIPRO objective

ALIPRO¹ aims at supporting the alignment of the NMS' national and regional research programmes with the European IST research in the area of mobile technologies, applications, and services.

Purpose of the document

The national report endeavours to present the findings of ALIPRO carried out in Poland. It comprises an overview on mobile IST situation and a detailed description of R&D programmes together with their evaluation. It contains also the conclusions drawn from the evaluation of the R&D funding system in Poland. It is meant for institutions and individuals active in the field of mobility.

The mobile sector in Poland

Poland with population of over 38 million has the biggest ICT market of all CEE countries. The ICT sector in Poland is entirely private and the big international telecoms play a leading role on the national market while genuinely Polish enterprises usually cooperate with the big players as subcontractors or enter market niches. Polish mobile IST market is the second largest in this part of Europe, next to Russia and according to analysts it will continue to grow rapidly over the next years, especially in view of recent launch of UMTS/3G. The stable and fast growth of the sector is accompanied by the market-oriented policy, regardless of political changes.

Regulatory background

The market of telecommunications in Poland is regulated by the Telecommunication Law, introduced in 2000 and amended on 16 July 2004 after EU accession. This act defines 2 main institutions responsible for the administration and monitoring of the sector – the Minister of Infrastructure and the President of Office of Telecommunications and Post Regulation (URTIP). URTIP was established to trace and eliminate discriminative practices of the telecommunication and post market.

¹ ALIPRO is an EU research project under Framework Programme 6. For more information on ALIPRO, please refer to <http://alipro.eurescom.de>.



Principal goals of URTIP for 2005 are *inter alia* to licence the UMTS and GSM 1800 frequencies and to ensure number portability. Another institution monitoring the situation in the telecommunications sector is the Office for Competition and Consumer Protection which is responsible for the protection of consumers' rights and ensuring fair competition. Officially, telecommunication regulatory regime in Poland is fully in line with the EU law and liberalised. Practically however, many activities have to be carried on still to liberalise it completely.

Polish research strategy

New circumstances in Poland forced by globalisation, EU accession and technological progress led to the necessity of reengineering the R&D financing system and its priorities. The Ministry of Science and Information Society Technologies (MSIST) issued therefore "A concept of the scientific, technological and innovation policy till 2020". The document not only proposes to increase the expenses on R&D, but also suggests changes in the methods of programmes' and R&D institutions' evaluation to promote only the best undertakings of practical value. Remarkable attention is given to convergent telecommunication and information services. The likelihood of improvements in R&D financing is considerable over the next years also according to the National Development Plan 2007-2013. As far as mobility development is concerned, most promising is the third priority "Support of the information society development". According to this priority, annual expenditures on ICT will rise from 2% up to 5% of GDP. It is foreseen however that the Ministry's activities will be focused more on incentives and support offered to the telecom operators than on direct activities. Another document which includes strategic objectives of science development is the National Framework Programme, which will define the major national R&D priorities. This document however is not ready yet. The national research strategy covers mobility development. The government is aware of the necessity of its development however, mobility however falls into ICT category and will not be treated as a single priority.

Polish research priorities are in line with ERA objectives as far as financing (increase in R&D spending is planned and promised); research objectives and the national

research activities management (shape of the strategy documents, development plans and their timeframes) are concerned. Polish research strategy has a considerable potential to integrate Polish R&D activities within ERA and facilitate the constitution of the common research market in Europe.

Polish system of R&D financing

In the initial phase of ALIPRO, a thorough exploratory research was conducted to identify on-going national and regional research programmes covering mobility. Acquired information proved that there are no particular mobility-related research programmes in Poland and that within existing programmes the share of mobility-related project in the total support granted is marginal. Public funds supporting R&D activities are allocated to all scientific disciplines by the Ministry of Science and Information Society Technologies through 2 programmes: “Peer-reviewed research grants” and “Subsidies for projects on national importance”. Another institution financing R&D projects in Poland is the Foundation for Polish Science. Its programme is called “Facilitating Technology Transfer – TECHNE” (FNPRP).

The system of science financing in Poland, regulated and managed by the Ministry of Science and Information Society Technologies is now in the transition phase. New legal documents with system improvements have recently replaced the old ones, however some of the new executive ordinances are still to be enacted, and therefore the procedural situation is vague. The main weaknesses of the Polish science financing system are *inter alia* poor programme project management quality and lack of development priorities or sectoral approach. Two aforementioned activities of the Ministry were chosen for evaluation as in the sense of ALIPRO² they are research programmes. These are namely:

1. Peer-reviewed research grants (PEERR);
2. Subsidies for R&D projects of national importance (SRDNI).

Programme evaluation:

² For the definition of national/regional research programme, as well as for the definitions of all other specific vocabulary used in this report, please refer to Annex I – Glossary.



Peer-reviewed research grants

PEERR is an R&D financing programme conducted by the MSIST. It covers the area of Poland, however it may also sponsor projects held in cooperation with foreign institutions. PEERR is not specifically related to the area of mobility, however also the mobility-related projects fall within its scope. It supports basic research. Operational goals of the programme and research priorities are unfortunately not clearly defined. Four categories of projects: commissioned ones, own projects, degree-related projects and development-related projects are supported by PEERR. Annual budget of the programme amounts for approximately 112 million euro and it finances about 3 200 R&D projects per year. The funding is attributed in a form of reimbursement of expenses and amounts for 100% of the total expenses. The support can be granted to the institutions carrying out R&D activities in a continuous manner, excluding enterprises. Information on the programme is available through the MSIST website and from its officers. PEERR is fairly comprehensive mostly in terms of its thematic range. The participation of private R&D entities however, is restricted without a good reason. PEERR is related to mobile IST neither in its entirety nor in its part. The quality of communications within PEERR is average. In general, the information provided by the founder is fairly complete, however feebly systemised. Lack of communication patterns or standards for the programme supporting thousands of projects annually, is a major drawback. PEERR is inert and does not stimulate innovation which is a result of lack of research objectives and strategic goals. The goals of the programme are neither specific nor measurable, neither aimed at restructuring polish research scene nor addressing the needs of polish economy in general. However, being one of only few sources of R&D support, it is indispensable. Administrative complexity of PEERR is acceptable. Reporting procedures are apparent and the reporting forms are available at the Ministry's website. There are no specific requirements or constraints. However, the programme founder is not flexible enough as far as contract adaptation is concerned. Fairly high level of the bureaucratic burden within PEERR lowers programmes impact as the researchers are bothered with paperwork in stead of focusing on content-related issues. Application process efficiency within PEERR is fairly high. However, due to large number of proposals submitted annually, selection of the best ones might be

aggravated. PEERR is passively opened since the participation of foreign partners is possible but without receiving founding. Co-funding from other sources is neither stimulated nor widespread. Furthermore, hardly any information on the programme is available in English. PEERR has a considerable financial capacity. The programme budget is relatively high comparing to other Polish R&D programmes, however in comparison to GDP or the total national budget it constitutes a miserable piece. Unfortunately, the budget of the programme is not increasing. Financial efficiency of PEERR is average. The programme management cost rate is not monitored; however it is a merit that the founder obeys contract arrangements as far as financial issues are concerned. The quality of PEERR management is low. The programme is neither revised nor adapted according to the changing circumstances and the founder finds it difficult to supervise the supported projects which has a direct influence on the programme's impact. Special software facilitating project management would be advisable to increase its effectiveness. Transparency within PEERR is dubious and should be improved. This might not necessarily be a result of founders' dishonesty but more of other factors, namely lack of revision and reporting mechanisms and procedural standards. Still, PEERR has a substantial impact. The programme facilitates development of the human capital as far as researchers and scientists are concerned and is one of few support facilities, therefore most desirable. The programme however has no direct impact on economy or industry and influences the market rather in the long term. Though the present quality of PEERR is not satisfactory, the perspectives for its integration within the European Research Area are considerable. Recent focus of Ministry's attention on the European issues is evident. To enable effective coordination of national research activities within ERA, the Ministry would have to develop project management tools and a system of standardised procedures as they are pivotal at coordinating a common research area.

Subsidies for R&D projects of national importance

SRDNI, similarly to PEERR is a part of the national system of science financing in Poland. These R&D support activities were distinguished for the sake of this report.



However, it should be noted however that they overlap as far as their many aspects concerned.

Annual budget of SRDNI amounts for approx. 49 million euro. The maximum single grant within the programme is not limited but usually adapted to the exigencies of the projects. SRDNI supports applied research and development activities. It covers all R&D disciplines, therefore also mobility-related projects fall within its scope. Potential beneficiaries of SRDNI grants are all entrepreneurs, public administration or local authorities able to implement the results of the projects into their business activity. Grant beneficiaries co-operate with an R&D institution during the project execution. The projects are financed from 50% up to 70% of their total budget. The goal of the programme is to enhance the cooperation between industry, R&D institutions and the state and to support innovation and technological progress; however neither priorities, nor strategic objectives of the programme are clearly defined. Two categories of projects can be distinguished within SRDNI: “commissioned” and “own”. The deliverables of SRDNI have a true value for the beneficiaries. The Ministry does not administer any specific analyses of the job creation potential of the programme. Programme’s impact can be however expressed also in terms of enhanced cooperation of industry and academia. SRDNI is an inclusive programme. It supports all disciplines of science within applied research and has no thematic gaps; however from the point of view of mobility development it is not a meaningful programme. The quality of communications within SRDNI is average. The programme lacks complete and clear information sources. Enterprises definitely require a different communication approach than public R&D institutions. The goals and rationale of SRDNI are partially valid. Since the rationale of SRDNI is not clear; the goals cannot be precisely identified. A closer dialogue between the founder and the beneficiaries could facilitate redefinition of objectives and improvement of programme’s impact. Administrative complexity within SRDNI is acceptable. On one hand there are no specific exigencies; however the reporting procedures are quite complex. The efficiency of the application process itself is high. Proposal preparation cost is relatively low but no specific mechanism facilitating selection of best proposals are available within SRDNI. SRDNI is a closed programme. European cooperation is practically impossible due to formal and practical constraints. Only Polish enterprises



and R&D organisations can receive funding which was proven by the beneficiaries. SRDNI has a considerable financial capacity. The budget of the programme is relatively high; however it is not on an increase and the total expenditures on R&D in Poland are still too low. Financial efficiency of SRDNI is average. The founder either does not monitor or does not publish programme management costs and according to the respondents it does not always reimburse all eligible costs claimed. The quality of management within SRDNI is low since no programme improvement or revision mechanisms are in place. Its transparency is ambiguous. This might be not necessarily an outcome of dishonest practices, but more of lack of ability and willingness to present the mechanisms and financial statements. Still, the programme has substantial impact on science and the competitiveness of beneficiaries. The results of the supported projects can be identified and described, however impact measurement activities are not a common practice within SRDNI.

Polish government endeavours also to encourage international cooperation between scientists and research institutions. Major part of this cooperation is a result of bilateral agreements. To some extent international cooperation is maintained also with support of PEERR as the grants can be exploited for participation in international programmes/projects. Poland participates in COST and EUREKA Programmes as well as in other initiatives like CERN, DESY or NATO Science Programme.

Techne programme

FNPRP is an R&D programme held by the Foundation for Polish Science - an independent, self-financing, non-profit organisation established in 1991 as a result of the system transformation in Poland. The programme aims at facilitating the transfer of innovative technologies from academia to industry. It does not give any priority to the area of mobility, and no mobility-related project has been sponsored so far. The eligible applicants for the TECHNE programme are: individual scientists, research teams from Polish Universities and other R&D institutions whose statutory aim is conducting research and so far, only public R&D institutions have been sponsored. The average annual budget of the programme amounts for €165 000 and it varies significantly over the years. The projects are supported financially through a

reimbursement of costs. TECHNE is a fairly comprehensive and inclusive programme. The beneficiaries declare that the programme reflects their needs and to this extent it is universal and useful, however as it finances only public R&D organisations its universality is limited. The quality of communications within TECHNE is excellent. The information provided by the founder is very complete and competent which was confirmed by the beneficiaries. The goals and rationale of the programme are far-sighted. They seem to correspond perfectly with the needs of the researchers. Furthermore, the beneficiaries are involved in the formulation of the programme and their opinions are taken into consideration by the founder. An advantage of this programme is its narrow specialisation. Administrative complexity within TECHNE is low. Formal requirements which occur, guarantee proper execution of the project and high content-related standards. The application process efficiency is high; however no extraordinary solutions are applied within this process. TECHNE is opened proactively. It encourages the beneficiaries to combine financial means of their own or from other programmes with the grant from the Foundation. Financial capacity of TECHNE is unfortunately low. The programme of such performance should be able to redistribute more funding than it does at present. However, the financial efficiency of FNPRP is considerable. Its management cost-rate amounts for 9% to 15%. The administration cost-rate is identified and monitored which unfortunately is not a common practice in case of two other Polish programmes. TECHNE's management quality is significant. The founder is constantly monitoring the expenditures and their relation to the amount of money spent on grants. However, no extraordinary management tools are applied. TECHNE is also a fairly transparent programme. Despite its low financial capacity TECHNE has a substantial impact. At this time, there are no clear perspectives for the integration of TECHNE within the European Research Area, however, if a reasonable idea appears, the Foundation is likely to involve in ERA-related activities.

Apart from the national resources, Polish institutions benefit also from the European ones - EU Framework Programmes' grants and the Structural funds.

Other mobility related R&D support activities in Poland

There are also other undertakings in Poland which empower R&D activities, however not directly in the form of R&D grants as in the case of R&D programmes. These promising initiatives are of great importance in view of mobility development.

One of these undertakings is BRAMA Laboratory, a common initiative of the Faculty of Electronics and Information Technologies of the Warsaw Technical University and a Polish mobile operator, ERA. It might serve as an example and pattern for cooperation between other Technical Universities and industry players.

Polish Platform for Mobile Technologies and Wireless Telecommunication³ is another example of a mobility related R&D initiative. Initiated in February 2005 it associates around 25 members. It was initiated to build a vision and a roadmap for the development of the Polish mobility sector.

Conclusions and recommendations

There are several best practices noticed among Polish R&D programmes and initiatives worth considering for adaptation at a wider scale, within other national R&D programmes in NMS and ACC. These are namely, communications procedures applied within TECHNE programme and its goals and rationale validity. Also BRAMA initiative turned out to be a very innovative activity.

Generally, the system of science financing in Poland requires improvement, especially in view of mobility development. For its effective and dynamic development a separate mobility financing programme or a respective mobile IST priority within existing national R&D programmes is a necessity. Development of such a programme should be carried through consultations with the main actors of the Polish mobile IST market. It is critical to increase the effectiveness of the financial means spent within the programmes and quality of their management. A software management facility is highly recommended. Communications within the programmes of the MSIST has to be improved to diminish effort related to acquiring necessary information especially by means of the proper motivation and surveillance

³ National Technology Platforms were inspired by European Technology Platforms which are a spin-off of the European Commission's objectives expressed in "Science and technology, the key to Europe's future - Guidelines for future European Union policy to support research", Brussels, 16.6.2004, COM(2004) 353 final.



of the front line staff of the Ministry. It is critical to set relevant goals within Polish R&D programmes and constantly adapt them to the market situation. The goals can undergo a proper revision only if the founder is able to monitor the effectiveness of the programme. Finally, an increase of transparency is indispensable and demanded especially in case of programmes distributing national budget-derived resources. This increase of transparency is critical also for the improvement of programmes' financial efficiency and quality of management.