Financial knowledge is an extremely important element not only of functioning and development, but more importantly of managing financial processes at local government level. Considering the progressing reforms of the national public finance system and the resulting consequences (legal, financial, as well as managerial) for shaping the financial management of the LGU’s, and also globalisation processes and the dynamic development of the financial services’ market, it is natural to require managers of the local government subsector of public finance to have thorough financial knowledge - current and interdisciplinary knowledge that would most importantly be reliable and practice-based. Constant changes of regulations, growing demands in budget management, progressing restrictions as concerns LGUs’ debt-raising capacity require not only current, “static” financial knowledge expected when executing statutory tasks, but also “dynamic” knowledge based on strategic planning, i.e. knowledge based on modern financial instruments.

JEL Classification: G0, G14, H75, H76
Keywords: LGU’s, financial knowledge, potential, organisational learning, financial instruments

Introduction
Local governments constantly evolve and undergo dynamic changes. This stems from the fact that their structure, rights, organisational form and methods of acting are always the effect of changing macroeconomic and socioeconomic conditions, economic and technical possibilities and many other factors impacting social behaviour and needs.

Managing local government units in the 21st century faces new challenges connected to the conditions of knowledge-based economy. Currently the greatest approval is gained by the view which states that the ability to manage knowledge becomes a truly deciding factor for the efficiency of economic processes. In the conditions of globalisation, free capital flow and dynamic development of the capital market and new financial instruments, the LGUs are forced to seek new paradigms for finance management, such as will focus – to a greatest extent than before – on diffusing information and knowledge, developing competences of key significance for the LGUs, developing financial knowledge among LGU employees and supporting organisational learning (Walczak, 2010).

Knowledge resources management and intellectual capital creation should be viewed as complementary, mutually dependent and interpermeating processes. Intellectual capital is the consequence of suitable application of financial knowledge in practice (Buckam, 2004; Bush, 2008; Craig and Moore, 2008). On the basis of the above arguments, it is possible to identify the premises connected with the role of knowledge in modern LGU management. They include the following determinants:

1 Prof. nadzw. dr Tomasz Wołowiec, Vice-director of the Institute for Financial Research and Analyses, University of Information Technology and Management in Rzeszow, wolowiectomek@gmail.com.
1) knowledge is an LGU’s strategic resource, as it is the basis for creating innovative processes e.g. in the area of finance management,
2) knowledge is created by people and their competences,
3) knowledge is a resource used in every part of an LGU’s functioning and at its every level (knowledge is the basis for configuring key investment processes and for developing key competitive competences),
4) usually there is not just one kind or category of knowledge; much more frequently synergistically integrated groups of various types of knowledge are created,
5) the quality, relevance and value of the created knowledge is verified by the local environment, the community, and the new added value created by investment for the inhabitants.

Intellectual capital as an LGU resource
Currently the subject’s literature takes the stand that the essence of knowledge management is the practical application of all resources an LGU has (both financial and organisational) to realise its strategic and development goals. However, it must be kept in mind that the processes of locating and developing knowledge are just a part of the local government’s success. To talk about permanent benefits resulting from LGU knowledge management, the new knowledge must be used in practice (Walczak, 2010). Considering the above, E. Skrzypek claims that knowledge resources in an organisation are its intellectual assets, a sum of the knowledge of individual employees and their teams. The resources change continually and form the process of LGU learning (Żmuda and Skica, 2009). An interesting view on the issue is presented by G. Urbanek, who states that intellectual capital constitutes an organisation’s invisible resource which creates visible effects. Intellectual capital is both knowledge in itself and the result of its transformation into intangible assets. It can thus be stated that the key problem is the LGUs’ ability to gain, generate, accumulate and effectively use the current and extensive knowledge, foremostly with the participation of LGU executive and decision-making bodies and LGU workers. In such a view, the human capital becomes a factor which contributes directly to building the potential of intellectual capital and is at the same time its valuable basic element (Skrzypek, 2009; Urbanek, 2007).

It may be said that from the viewpoint of the specific character of knowledge management in the LGUs the most crucial matter is to recognise the basic factors responsible for creating the particular components of the intellectual capital, and to diagnose the relations between them. Such approach stems from the fact that the LGUs are not uniform, both with regard to the administrative level and to financial autonomy or the scope of own tasks. Thus it must be noticed that in practice there appear various factors impacting the development of the selected elements of intellectual capital. They are directly dependent on such conditions as: the LGUs’ geographical location, their own income structure, financial autonomy or their tangible and intangible assets. An equally important role belongs here to the entrepreneurship of inhabitants and management innovativeness, and finally also the quality of public services, which derives from the inhabitants’ expectations and their activity.

When making research on local governments, it must be noted that the dynamic increase of the LGUs’ investment expenditure\(^2\) and ever more intensive search for alternative sources of

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\(^2\) Local governments have nearly 180 milliard PLN yearly, almost 24\% of which is invested (i.e. three times their deficit). The government has nearly 300 milliard PLN yearly to use, and invests about 15 milliard PLN. Local governments’ debt amounts to nearly 30\% of their yearly income, and the government’s (State Treasury’s) debt amounts almost to 330\% of state budget income. Thus the deficit of the local government sector is evidently used to execute investment project of key importance to the country’s development, and mostly co-financed from EU means. The LGUs’ investment expenditure creates a new added value in economy, and through the multiplier effect it stimulates the economy, in the situation when the enterprise sector refrains from investments. Introducing
financing investments and further development perspectives make knowledge – understood as intellectual capital – to the priority of local government targets and a marker of LGU competitiveness. The above findings bring us closer to structuralising the concept of knowledge management and recognising the conditions for the processes of creating intellectual capital in the LGUs. Research conducted in 2003-2004 by B. Kożuch showed that local government employees appreciate active and passive forms of training in knowledge and vocational skills development. In nearly half of the examined units a training policy was functioning, and the training system took into account: training planning, training needs assessment, training implementation and training process effectiveness assessment. The opinions on the actual situation proved the need for far-reaching changes in human resources management in public organisations. None of the examined organisations claimed to have a training system consistent with the training policy aims or principles. In the examined units there was no comprehensive, fully realised training policy, either (Kożuch, 2004).

A problem revealed by other studies is the low level of financial knowledge in the LGUs and a skills deficit with Economics graduates who start their career in the broadly understood public sector. Although, according to respondents in a survey conducted by the Polish Bank Association and the Polish Chamber of Insurance, education standards prepared by the Ministry of Science and Higher Education are assessed positively, the same respondents indicate a range of faults in organising the education process. The comments are convergent with opinions of experts in the above described issues (Kukliński and Maszybrocki, 2008). According to research results and the experts’ opinions, the current didactic offer of universities and the education process focus mainly on courses within quantitative and not qualitative economics, the offer includes too few practical issues and shows considerable faults in specialist education. Importantly, the respondents assess study programmes much higher than the preparation of graduates. The results suggest that the difficulty level at Economics studies is not high enough, which confirms the opinion of a low rigour level and difficulty level of examinations and tests in the said study paths. In such situation, there appear false notions about Economics graduates. Unfortunately, often their skills do not meet the requirements posed before them on commencing work (Żmuda and Skica, 2008). Research and practice show that graduates of Economics, Finance and Accounting have almost no practical skills, which is shown e.g. in poor knowledge of computer programmes, no preparation to make economic analyses, to build relations with customers, etc. Meanwhile, the discussions conducted on the need to reform higher education concern education methods only to a small degree (Osiński, 2010). In effect, Economics graduates have low vocational competences, e.g. as concerns learning, efficient information processing, using analytic tools, using knowledge to solve operational and strategic problems, working in a team, openness to changes, solving conflicts by negotiation, as well as performing tasks independently and creatively (Szelrag, 2010).

the analysed limits will result in decreased investment, and further in an increased unemployment rate (the state’s transfer expenditure will rise) and smaller income from VAT, PIT and CIT. In practice, this means lower GDP growth rate. Local government units have earned a surplus in 2007, and ended 2008 with a deficit at a level of 1.8% of their income. In the next two years, that deficit grew over five times and was about 15 milliard PLN in 2010, which constituted 9% of the total LGU income JST and 1% of GDP. (Cf. Kuleśza, M., Bitner, M., Zatapianie zielonej wyspy (Sinking the Green Island), “Rzeczpospolita” daily of 18.04.2011, p. B12, and www.mf.gov.pl).

Kożuch, B., Zarządzanie organizacjami publicznymi w warunkach transformacji systemowej (Managing Public Organisations in System Transformation), research project of the State Committee for Scientific Research-Ministry of Scientific Research and Information Technology 2003-2004 nr 2H02D 05924.
Knowledge and effective use of LGU financial potential

Considering on the one hand the presented significance of knowledge in the process of effective management and use of LGU potential, the change evolution directions in the whole public finance sector, the role of the capital market and various financial instruments in LGU management process, and on the other the traditional view on the LGUs as a kind of “public tasks administrators”; and adding to that the level of knowledge of graduates and young employees of the LGUs’ financial departments, the following conclusions may be drawn (Żmuda and Skica, 2009):

Firstly: The changes occurring in the whole public finance sector, the effect of the adopted strategy of reducing the public debt and budget deficit4, will cause the assumed debt to grow – in relation to the LGUs (and their associations), while the pace in which it grows will diminish, in consequence of the decreasing deficit of this group of units. The LGUs’ loan needs will stem from investment expenditure, mostly for infrastructure projects, including those co-financed with means from EU funds. Similarly to the previous years, the most debt will be generated by cities with district rights and communes5. According to the forecast of the Ministry of Finance, the dominating instrument in financing the LGUs’ loan needs will still be credits obtained from commercial banks in the Polish market. Also the debt from communal bonds will grow, particularly those issued by large local government units. The rule of the LGUs’ balanced current budget, in force since the beginning of 2011, will influence the scale of new liabilities that are incurred. The LGUs may incur liabilities until 2013 on the principles defined in the act of 30th June 2005 on public finance6. The rules of incurring liabilities defined in the act of 27th August 2009 on public finance7, aimed to counteract the LGUs incurring excessive debt, enter into force in 2014.

Secondly: In a real view, considering e.g. inflation, the real income of local government units seems to be stable, and in some cases even to decrease. There are several causes of that: income structure unfavourable for local government units, too low means – in relation to needs – granted to local government units from the state budget, high bank credit rate. Another factor which is unfavourable for the state of public finance is the shifting of ever more tasks and obligations to the local government level without a suitable income increase.

The above described tendencies, dynamics of changes in the public finance sector, new legal regulations and the process of limiting the public finance sector deficit give considerable significance to knowledge of the principles of managing local government units’ finance. The need to finance

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5 The discussion on the expenditure rule for local government units and on decrease of OFE (open-end pension funds) fees indicates the significance of the two basic public finance parameters (PFS financial result in relation to GDP and PFS public debt in relation to GDP) which prove the public finance sector’s economic condition. The financial result of the whole PFS comprises of the results of three subsectors of: government, local government and social insurance. The whole PFS getting closer to an index of 55% means that there is a gap between public income and expenditure, the main sources of which are: world financial crisis, limiting the fiscalism index (from 35.1% of GDP in 2007 to 29.3% of GDP in 2011) and increased GDP redistribution index (resulting from increased PFS expenditure on co-financing investments and tasks executed using EU means – in 2007 it was 41.1% of GDP, and in 2011 as much as 48% of GDP). The three factors disturbed the balance of public finance. The financial crisis caused a decrease of tax income, resulting from a decrease of GDP growth rate. Due to discretionary results, the novelisation of the budget act caused the income from non-tax sources to increase by 9.6 milliard PLN. In 2010 and 2011, non-tax sources additionally compensated for the decrease of tax income. Important is here the payment from profit of NBP to the amount of 3.9 milliard PLN in 2010 and 6.2 milliard PLN in 2011. In 2009, as a result of budget novelisation, public expenditure was limited by 31 milliard PLN, but it needs to be kept in mind that the LGUs – as opposed to the government subsector – have no income sources they can reach to at some one time in a financial crisis.
public tasks in the conditions of limited own income will require a modern approach to managing LGU finance. The approach means active use of fiscal consolidation at the local level, effective debt management based on time value of money analyses and professional approach to financial planning, by developing suitable long-term financial strategies for the LGUs to enable programming financial policy at the local government level of the public finance sector. Such approach requires professional knowledge not only in a holistic view on LGU financial management, but also in the complementary use of the knowledge in modern tools of the capital and monetary markets. Thus an important element of that knowledge is how to effectively use local taxes and fees, income from communal property and financial analysis tools to construct comprehensive strategies, development programmes and long-term financial forecasts.

Thirdly: The presented restrictions on the freedom of local government units to incur liabilities, in connection with the need to treat the LGUs as active market entities and at the same time as participants of the capital market are confirmed by new issues of communal bonds, performed even by medium-sized and small communes. By the end of the 3rd quarter of 2010, 418 Polish local governments had issued bonds. Many of them issued the bonds several times, which gives a true view to the size of the bonds market in Poland. Issuers include both big conurbations such as Gdynia, Gdańśk, Łódź, Kraków, medium-sized cities such as Ostrów Wielkopolski, Gorzów Wielkopolski, Krotoszyn, Ważrowiec, Jawor, or Międzychód, and small rural communes, e.g. Mścianożów, Mięścisko, Udanin, Lubasz and Kunice. Most of the previous issues were traded non-publicly in the domestic market. Since GPW Catalyst, a new market of corporate and local government bonds, was opened in September 2009, more and more non-public issues are traded. These are bonds of e.g. such communes as: Kórnik, Radlin, Poznań, Warszawa, Rybnik, Turek, Ząbki and Zamość.

Bonds are also issued by rural districts and regional governments. District bonds were issued e.g. in the districts of: Środa Śląska, Lublin, Jarosław, Zgorzelec and Gniezno. Regional bonds were issued e.g. by the Wielkopolskie, Małopolskie and Podlaskie regions. By the end of the 3rd quarter of 2010, 448 local government units had liabilities from bond issues to the total amount of 9 169 million PLN, with yearly dynamics of 68.7%. LGU bonds make up 14.49% of the whole market of non-treasury debt securities in Poland. Communal bonds issues are organised by banks, which in most programmes undertake to acquire all bonds and organise a secondary market for them. The main advantage of such closed issues are low transaction costs (connected with preparing the issue and using the services of the bank - organiser). Research indicates that 50% to 70% of bonds issued by local governments remain in security portfolios of banks, i.e. the organisers of the issues.

In the 1st quarter of 2011, the value of the communal bonds market reached the level of 11.47 milliard PLN. In a year-to-year view, the value of this segment grew by 61.9%. During the last quarter, its value has risen by another 5.7%. Local governments which issued bonds to the total value of 663.71 million PLN in the 1st quarter of 2011 include the communes of: Brzesko, Brzozów, Bydgoszcz, Kraków, Lublin, Wadowice, Zamość.

For example, in the years 1997-2010 the PKO BP bank organised communal bond issues for 175 communes, 28 districts and five regions, to a total value of over 4 milliard PLN. With such rich experience, it could prepare and realise offers both for big Polish cities, e.g. Bydgoszcz, Kraków, or Warsaw, and small communes. In its portfolio, the bank has e.g. Polish first communal bond issue for a region (Wielkopolskie) and the first issue after the war for Warsaw (Białołęka commune). In September 2009, PKO BP organised the first communal bond issue listed in the Catalyst market (for Radlin in the Silesian region). The issue for Warsaw in February 2011 was the 500th issue organised by the bank. Similar offers are presented by other banks and numerous consulting and advisory companies which specialise in preparing comprehensive bond issue offers and managing the whole process.


US: billion [translator’s note].
The LGUs’ financial knowledge on communal bonds. Practical study

Communal bonds belong to non-treasury debt securities (NTDS). They are issued in zlotys or in other currencies to obtain financial means directly from the monetary market. They are most often bond series sold within issue programmes. In the primary market the bonds are sold by the agency of the bank which is the issuer of the NTDS emission. In the secondary market, purchase and sale are usually done through the bank - issue agent, or directly between the entities. The product is addressed to investors locating their surplus money. The transactions are made as a form of investing free financial means, i.e. purchasing communal bonds or obtaining liquid means by selling them (cf. Table 1).

Table 1: Non-treasury debt instruments market in Poland (quarters 1-4 of 2010 and 1st quarter of 2011)

<table>
<thead>
<tr>
<th></th>
<th>Q1 of 2010</th>
<th>Q2 of 2010</th>
<th>Q3 of 2010</th>
<th>Q4 of 2010</th>
<th>Q1 of 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market value in millions PLN</td>
<td>50 704.25</td>
<td>58 789.07</td>
<td>63 295.85</td>
<td>67 278.87</td>
<td>70 482.80</td>
</tr>
<tr>
<td>Year-to-year dynamics</td>
<td>19.3%</td>
<td>40.5%</td>
<td>47.1%</td>
<td>40.2%</td>
<td>39.0%</td>
</tr>
<tr>
<td>Quarter-to-quarter dynamics</td>
<td>5.6%</td>
<td>15.9%</td>
<td>7.7%</td>
<td>6.3%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Short-term debt securities in millions PLN</td>
<td>10 675.00</td>
<td>11 350.86</td>
<td>14 019.65</td>
<td>14 793.81</td>
<td>14 492.29</td>
</tr>
<tr>
<td>Year-to-year dynamics</td>
<td>- 13.4%</td>
<td>- 1.8%</td>
<td>15.1%</td>
<td>48.4%</td>
<td>35.8%</td>
</tr>
<tr>
<td>Quarter-to-quarter dynamics</td>
<td>7.1%</td>
<td>6.3%</td>
<td>23.5%</td>
<td>5.5%</td>
<td>- 2.0%</td>
</tr>
<tr>
<td>Enterprise bonds (over 365 days) in millions PLN</td>
<td>13 968.93</td>
<td>14 771.43</td>
<td>16 403.62</td>
<td>17 576.83</td>
<td>18 564.98</td>
</tr>
<tr>
<td>Year-to-year dynamics</td>
<td>0.9%</td>
<td>6.1%</td>
<td>19.3%</td>
<td>44.6%</td>
<td>32.9%</td>
</tr>
<tr>
<td>Quarter-to-quarter dynamics</td>
<td>14.9%</td>
<td>5.7%</td>
<td>11.0%</td>
<td>7.2%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Number of issuers</td>
<td>86</td>
<td>95</td>
<td>99</td>
<td>104</td>
<td>116</td>
</tr>
<tr>
<td>Bank bonds (over 365 days) in millions PLN</td>
<td>18 970.20</td>
<td>24 704.42</td>
<td>23 703.20</td>
<td>24 053.46</td>
<td>25 949.60</td>
</tr>
<tr>
<td>Year-to-year dynamics</td>
<td>58.9%</td>
<td>110.3%</td>
<td>103.5%</td>
<td>26.8%</td>
<td>36.8%</td>
</tr>
<tr>
<td>Quarter-to-quarter dynamics</td>
<td>0.0%</td>
<td>30.2%</td>
<td>- 4.1%</td>
<td>1.5%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Number of issuers</td>
<td>14</td>
<td>19</td>
<td>23</td>
<td>27</td>
<td>26</td>
</tr>
<tr>
<td>Communal bonds (over 365 days) in millions PLN</td>
<td>7 090.13</td>
<td>7 962.36</td>
<td>9 169.38</td>
<td>10 854.76</td>
<td>11 475.93</td>
</tr>
<tr>
<td>Year-to-year dynamics</td>
<td>61.5%</td>
<td>72.8%</td>
<td>68.7%</td>
<td>57.2%</td>
<td>61.9%</td>
</tr>
<tr>
<td>Quarter-to-quarter dynamics</td>
<td>2.7%</td>
<td>12.3%</td>
<td>15.2%</td>
<td>18.4%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Number of issuers</td>
<td>417</td>
<td>432</td>
<td>448</td>
<td>458</td>
<td>458</td>
</tr>
</tbody>
</table>


13 Obligacje komunalne w Polsce (Communal Bonds in Poland), BRE Bank-Case brochures, No. 84/2006, p. 5.
Bond issue by local government units is very strongly supported by the following circumstances:

1) the possibility to obtain funds for investments which cannot be financed solely with budget means, or EU means, or preferential credits (means from bond issue may also be used to balance the budget),

2) no need to secure or exactly define issue aims (the means from the bonds are not allocated only to one specific investment),

3) lower costs, as compared to bank credits, of obtaining the means and of debt service resulting from bond issue,

4) being among the safest security issuers – right after the State Treasury – the LGUs may offer the buyers relatively low interest rates, using the possibility to offer additional services with the bonds (e.g. reductions of local fees),

5) important for the LGUs is not only the lower interest rate from the acquired means, but also the frequency of paying the interest (in the case of bonds it is usually paid once a year, while credit interest is paid even on a monthly basis),

6) the possibility to independently settle dates and conditions of bond repurchase and interest rate amounts, which may depend on e.g. the inflation rate or the profitability of other financial instruments,

7) the possibility to introduce the option of earlier repurchase – before the issue expires, which secures the issuer from unfavourable changes of interest rates,

8) the option of choosing the potential group of bond buyers, which may help obtain new private investments in the territory of the given local government unit,

9) market acceptance – communal bonds are purchased by all investor groups, as they are the safest form of granting a loan,

10) communal bonds are commonly seen as the fairest way of financing investments, as public bond issues are usually purchased by the inhabitants themselves, who are going to use the investments in the future,

11) as opposed to a bank credit, there is no need to secure the bond issues e.g. by making an entry in the mortgage register (the only security may be the income of the local government units planned for the future),

12) the LGUs do not pay income tax from a bond issue (income tax from the gained interest or bond discounts are paid only by bond buyers),

13) the promotional and marketing effect connected with spreading information about the commune issuing bonds (it is a sign for the investors that the authorities of such a unit are active in seeking capital, are not afraid of new financial instruments and take care of their community – in effect, the investors are more willing to direct their own investments there).

The increasingly better developed capital market and strong competition in the availability of external financing sources for public finance sector entities result in lowering costs of issuing new bonds and in a profitable conversion of debt in the form of a bank credit into communal bonds. In the recent years (2009-2011) commissions paid to the issue organiser have made up only from 0 to 0.5% of the whole issue value. Any higher commissions that might appear result from evading tendering procedures when choosing an agent or occur when the issuer wants to have a low bond interest rate (margin over the inflation rate, profitability of 52-week treasury bonds or the respective WIBOR rate)\textsuperscript{14}.

\textsuperscript{14} It is worth noting here that the interest from communal bonds is most often based on the profitability of 52-week treasury bonds or the WIBOR 6M or 1R rate and contains a margin for investors (otherwise they would probably
Conclusions

Financial knowledge is an important factor of LGU functioning and development in the conditions of world economy globalisation, necessary reforms and suggested changes in the functioning of the whole public finance sector. It is also the ability to manage financial processes at a local government unit level in the conditions of limited freedom of debt management and reaching for investment means from European funds.

Considering the progressing reforms of the public finance system in Poland and the resulting legal consequences for LGU financial management, and on the other hand taking into account the development of the financial services’ market addressed to local governments, the quality of employees and their knowledge in modern and dynamic local finance management gain a new dimension.

The LGUs seek knowledge, specialist training, and often together with universities realise various projects – financed with EU means – concerning training, consultancy and implementation. The LGUs have the financial means for education and training, as proved both by the provisions of budget resolutions and by reports from realising the budgets. On the other hand, financial education based on a modern understanding of financial management must be stimulated, with consideration for the new challenges in economy and finance after the subprime crisis, as well as for the theoretical requirements and practical concepts of New Public Management.

In conclusion, it must be said that the dynamic increase of the LGUs’ investment and their increasingly intensive search for alternative sources of financing investments and further development perspectives make knowledge, understood as intellectual capital, to the key factor of stimulating the LGUs’ competitiveness.

References


choose safer treasury securities). The margins for investors are usually 0-2%. Of course, the longer the maturity, the higher the margin, but – interestingly – the lowest margins are found in the greatest and the smallest issues. This results from the fact that in the tenders for medium-sized issues (between 7 and 20 million PLN) there participate neither small financial institutions, for which the issues are too big, nor big institutions, for which the issues are in turn too small. Thus there are not many interested in the securities and hence a higher margin must be offered.

15 Reports from LGU budget performance – expenditure on training and education. Within the European Social Fund training projects are realised from the Operational Programme Human Capital, priority V “Good governance”, measure 5.2 “Strengthening the potential of local government administration”, sub-measure 5.2.1 “Modernisation of management in local administration”. Such projects were conducted by the Ministry of Internal Affairs and Administration.


