

# **1. PREIS / HIGHEST AWARD**

## **ING. ANDREA SZABOVÁ:**

### **HOW TO MAKE THE HOUSING STOCK REFURBISHMENT MORE EFFICIENT IN SLOVAKIA**

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#### **ABSTRACT**

This paper presents possibility How to make the housing stock refurbishment more effective in Slovakia from the financial point of view. Main financial sources for maintenance and refurbishment of housing stock are divided to own sources and foreign sources. The Own financial source is Fund for maintenance and repair. The Foreign sources are divided to public and private sources. The Public sources come from The Ministry, The State Fund for Housing Development and The Guarantee and Development Bank. The Private sources come from Contractual Savings for Housing, Mortgage Credits, Commercial Credits and Consumer Credits. The State Fund for Housing Development doesn't operate very well in Slovakia and therefore it is necessary to make some new suggestion to operate more effectively.

#### **INTRODUCTION**

Housing is one of the main human needs and flat or dwelling is a place, where is this need fulfilled. From that point of view the "consumption" of housing can't be substituted with different type of goods. Dwelling is fixed in space and joined with land. The housing in one area is joined with job, educational, shopping and other opportunities, and therefore the housing in one area is difficult to substitute with housing in other areas.

The situation in the housing sector in Slovakia has been changed seriously during last 15 years. The new housing production has decreased considerably in comparison with years before 1990. The hugest production was built in 1970's, when there were constructed mainly panel reinforced prefabricated multi-family houses. The Slovak housing stock is quite young compared with the housing stock in other Western European countries, but neglected maintenance caused that these multi-family houses have been often in a bad condition and suffer from systems (structural) failures. Therefore it is necessary to maintain, modernise and refurbish multi-family housing stock in Slovakia. For this refurbishment there are also needed some finances, which are possible to obtain from different types of financial sources. Some of them don't operate effectively and therefore they need some changes, which will be also processed as one suggestion in this paper.

#### **1 ANALYSIS OF CURRENT STATE OF HOUSING STOCK IN SLOVAKIA**

The basic characteristic of housing market is unfolded from the housing stock structure. According to the census of people, houses and flats of 26 May 2001, Slovakia had 5,379,455

inhabitants, which represented increase of 105,120 inhabitants compared to the census of 1991. Housing stock included 1,884,846 dwellings, from which 1,665,846 were inhabited permanently (88,4%) and 219,310 uninhabited (11,6%). Dwellings in family houses contained of 49,2% from the housing stock inhabited permanently. The overall housing stock has been increased about 116,013 of housing units from the year 1991 to 2001. Most Houses, almost 75% of the overall housing stock, had occurred in houses build in years from 1961 to 2001. Housing standard as number of housing units per 1,000 inhabitants presented 350.4 of all housing units per 1,000 inhabitants and 309.6 housing units inhabited permanently per 1,000 inhabitants. Number of housing units per 1,000 inhabitants in Slovakia is comparable with countries, which joined to EU in second wave (1 May 2004: Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia – i. e. EU10 countries, but considerably tails away behind the countries of Western Europe, where this indicator ranges from 400 to 500 housing units per 1,000 inhabitants.<sup>1</sup>

Table 1.1: Housing and dwelling stock in SR in individual periods of the census of houses and flats<sup>2</sup>

Date of Census	Houses together <sup>1)</sup>	Permanently inhabited houses		Dwellings together	Permanently inhabited dwellings	
		Together	In family houses		Together	In family houses
1. 3. 1961	-	747 605	546 312	.	984 131	611 800
1.12.1970	845 673	815 896	632 376	1 185 502	1 150 148	666 645
1.11.1980	930 639	869 839	797 623	1 496 372	1 413 932	826 526
3. 3. 1991	989 940	864 357	794 822	1 768 833	1 617 828	811 440
26.5.2001	1 034 287	862 274	792 555	1 884 846	1 665 536	820 042

1) in 2001 – including accommodation facilities without dwelling

<sup>1</sup> Up-to date of the Housing Construction Development Concept. Approved by the resolution of the Government of SR No. 952/2003. MVR SR.

<sup>2</sup> [www.statistics.sk](http://www.statistics.sk)

Table 1.2: Indicators of housing equipment

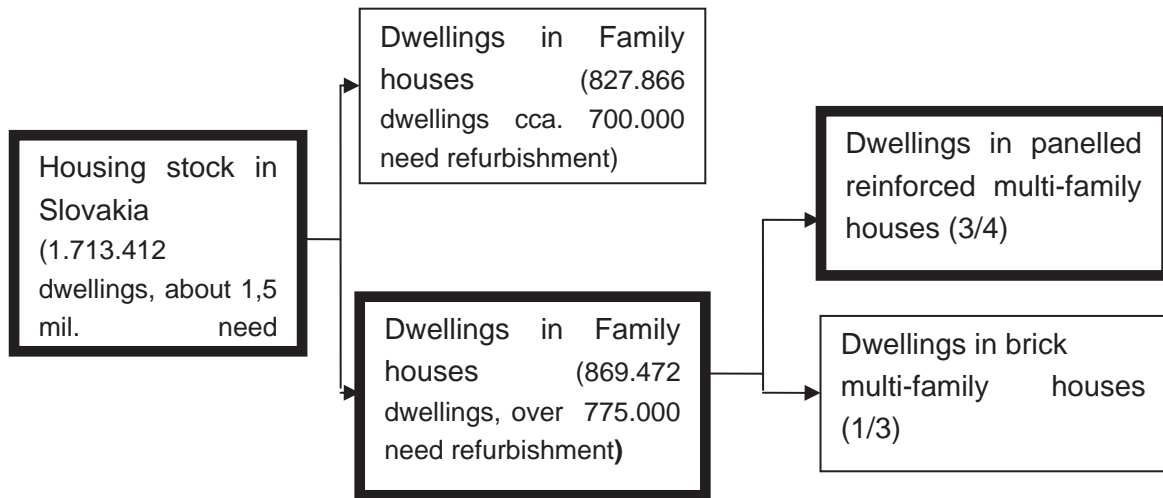
	Number of persons per dwelling	Number of flats inhabited permanently per 1000 inhabitants	Number of all flats per 1000 inhabitants
1961	4,24	235,77	235,85
1970	3,94	253,49	261,28
1980	3,51	283,29	299,80
1991	3,24	306,74	335,37
2001	3,21	309,61	350,38

Nowadays, there is deficit of about 250,000 dwellings in Slovakia. New dwellings are not constructed quick enough and therefore Slovakia has to maintain its existing housing stock, which is not possible to substitute with new one so far. Massive construction of the Communism regime caused, that majority of current housing stock consists of panelled reinforced houses. Panelled reinforced houses show nowadays a lot of failures, which need maintenance and refurbishment. Those are caused by long-time neglected maintenance, bad technology or usage of non-quality materials. The best solution would be to demolish neglected houses and then to build new one, which would satisfy all conditions (economics, technical, technological, spatial, etc.). Such a solution is not possible under current conditions in Slovakia, because refurbishment of existing housing stock is cheaper than demolition and new construction of houses in the long run. If we also take into account looking for temporary dwellings for those families, who are waiting for new dwellings because of demolitions of old ones, this solution does not come into consideration at all. We could not accommodate all those families because of housing deficit.

Therefore it is necessary to maintain, repair, refurbish and renovate of panel reinforced housing stock, because size and quality of panel reinforced construction built up to now and real possibilities of new construction show that existing housing stock will be still an important factor of housing for next decades of the third millennium. Refurbishment of panelled reinforced housing stock is therefore inevitable nowadays.

The following diagram displays (diagram 1.1) housing stock in Slovakia in classification of dwellings in family houses and dwellings in multi-family houses with whole number of dwellings and also with dwellings, which needs refurbishment. From the whole number of dwelling (869.472) occurred in multi-family houses, over 775.000 dwellings need refurbishment, while according to Ministry of Construction and Regional Development (MVR SR) assumes costs for maintenance, repair and refurbishment at 396 mild Slovak Crown.

Diagram 1.1: Housing stock in Slovakia and their need of refurbishment



Housing refurbishment is carrying out of sizeable repairs, replacement and modernization of building constructions and technical facilities of buildings based on their age and objectification of physical state, in order to eliminate of static, hygienic and user failures of buildings. The result should be strong prolongation of building lifetime to standard level of today. Under objectification of physical state of building we understand comparison of actual physical state of building with generally valid technical requirements, while the process of refurbishment comes at the end of constructions lifetime, i.e. at the state, which should endanger safety of usage and health of inhabitants.<sup>1</sup>

## 2 BASIC SECTORS OF HOUSING

At the housing market, wide-range of housing supply exists, which differs by the type of real property, locality, quality, price, type of owners, etc. As the basic types of housing are defined in the frame of housing policy, they are deduced from the legal frame of dwelling or house tenure, in other words from the extent of carrying out of property rights related to the respective real estate. Types of housing characterised by legal ground of dwelling usage in combination with other characteristics establish basic types of housing sectors – tenures. In theory and real housing policy there are 5 basic types (tenures) of housing defined:<sup>2</sup>

- Owner-occupied sector (identity of owner and user, almost unlimited property rights application),
- Co-operative sector (via participation and wide-range of tenants' usage rights, according to concrete legal framework related especially to commercial negotiability of membership shares, this housing approaches either rental or owner occupation).
- Private rental sector (market rental, often low protection of tenants),

<sup>1</sup> I. The Housing Construction Development Concept with Stress on Housing Stock Renewal. Approved by the Resolujtion of the Government of SR No. 1088 of 8 December. MVRR SR.

<sup>2</sup> Donner, Ch.: Housing policies in the EU countries...

- Non-profit rental sector (initially social functions and somewhere still up to now, mostly cost rent),
- Public rental sector (social functions, rent under the market level, wide-range tenant rights, often participation of tenants on management of the housing stock).

## 2.1 RELATION OF INDIVIDUAL HOUSING SECTORS TO HOUSING REFURBISHMENT

In 1989, revolution took place in Slovakia, which consequence was change of socio-political and social conditions, and thus also transition from socialism to democracy. Slovakia became transforming country from the central planning economy to the market economy, what had impact also on the housing sector, which has gradually altered from the public rental sector to the owner-occupied sector. In the year 1993 Slovak republic was established, dividing of Czechoslovak federative republic to the two independent states – Czech republic and Slovakia.

In the housing policy this year (1993) was also important, because privatisation of housing stock started. Slovaks have started to learn, what it means to be owner in partly market conditions. Many of them do not understand even today, that although they are owners of dwelling, they have to cover costs for maintenance and refurbishment of the multifamily house, because they are co-owners of the common parts and facilities of the multifamily house, which must have been maintained and renewed by them all together. It is defined in detailed way in the Act No. 182/1993 Coll. on Flat Ownership Transfer, which defines even what “the condominium of flat owners” means, and it leaves two possibilities of providing operation and administration after the transfer of flat ownership. But, it clearly imposes an obligation to provide administration of the dwelling after privatisation. An administrator can be either the condominium of flat owners or a housing management company. Moreover, the Act imposes an obligation of the condominium or of the housing management company to establish a fund of operation, maintenance, and repairs and to collect monthly retainer payments from individual owners of flats in the respective fund. The sum of the payments depends on the size of flat area and it has to be approved by voting. At present it is very low and it ranges from SKK 5 to 10 per m<sup>2</sup> of the flat area.

The process of privatisation is slowly closing. In municipalities only the most complicated cases remained not repurchased, where all ownership relations are still not settled. The most complicated and the slowest process of privatisation was related to sector of cooperative flats, where more cases of bankruptcy are already known.<sup>1</sup>

In 1991 there was 42,6% of flats in multifamily houses in the state ownership, which were transformed to the ownership of municipalities, 44,4% was in ownership of flat cooperatives and 13,0% was the rest according to the survey of 31 December 1998, which included all municipalities above 2000 inhabitants and all flat cooperatives (survey was related to 678 thousands of flats, out of which 372 thousands was municipal and 306 thousands of flat cooperatives, what represented more than approximately 80% of flats in dwellings).<sup>2</sup>

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<sup>1</sup> Tytykalová, H.: Hardly gained experiences. Privatisation of socialistic housing stock, which brought absolutely new phenomenon for citizens, is being slowly ended today. Profit No. 44/2000, p.12-13.

<sup>2</sup> Ivanička, K. – ZÚBKOVÁ, M. – ŠPIRKOVÁ, D.: Housing policy. Editor STU, Bratislava 2002, p. 35.

Table 2.1: Structure of housing construction according to form of ownership from 1949 to 2000

	Form of ownership									
	Private		Municipal(state)		Cooperatives		Rest		Together	
1948 - 1960	131 668	52,20%	116 779	46,30%	2 774	1,10%	1 009	0,40%	252 230	100%
1961 - 1970	149 946	46,56%	66 863	20,76%	88 501	27,48%	16 728	5,19%	322 038	100%
1971 - 1980	138 356	31,29%	98 360	22,25%	125 907	28,48%	79 489	17,98%	442 112	100%
1981 - 1990	104 542	31,07%	65 413	19,44%	159 617	47,44%	6 893	2,05%	336 465	100%
1991 - 1995	30 117	47,00%	9 868	15,40%	23 196	36,20%	897	1,40%	64 078	100%
1996	3 510	56,10%	1 427	22,81%	1 307	20,89%	13	0,21%	6 257	100%
1997	4 009	55,13%	1 858	25,55%	954	13,12%	451	6,20%	7 272	100%
2000	11 386	91,22%	808	6,47%	107	0,86%	181	1,45%	12 482	100%

Table 2.2: Role of different stakeholders on the housing stock refurbishment in Slovakia and other V4 countries and its comparison to Vienna model<sup>1</sup>

	SLOVAKIA AND OTHER V4 COUNTRIES			VIENNA MODEL
	Before 1940 (private rental)	1945 –1989 Socialist	1989 – present Condominium based	
Prevailing type of housing stock	Private rental	Public rental	Owner-occupied	
Decision-making	Private landlord	Local authority	Condominium association	Rehabilitation organisation, municipal level
Influence of inhabitants	No influence	No influence	Total influence (veto power of individuals)	Minor, related to the building, Total, related to the flat
Costs and housing expenditures	Direct relationship	No relationship	Direct relationship	Weak relationship (costs to be repaid within 15 years)
Availability of loans	Bank loans, on market terms, taken out by the landlord	No need for loans	Bank loans on market terms, but individual under-writing	Bank loans on market terms, but individual under-writing
Availability of subsidies		No need for subsidies	Central interest rate subsidy, local cash subsidy	Subsidized loan, cash subsidy, tax deduction
Size of units of renovation	Buildings	Block of houses	Buildings, parts of buildings	Action areas, buildings

Change of ownership relations also brings important changes in the relations of housing refurbishment, namely in the use of financial sources from the fund of operation, maintenance and repair. Condominiums, which represent always only one building, are much smaller units than municipalities or co-operatives, in which means accumulated in the fund of operation, repair and maintenance, could be used in accordance with needs of individual buildings in municipality or co-operative. Because of that reason also the refurbishment of building in the condominium should be more effective as for smaller units finances for refurbishment can be quicker accumulated.

### **3 FINANCING OF HOUSING STOCK REFURBISHMENT**

After identification of housing refurbishment needs and of course identification of costs necessary for refurbishment, there some questions come into the consideration: Where? How? Which conditions? And how much it will cost? to ask for finances. Two possibilities exist for financing of housing stock refurbishment. Financing is possible either via natural entities or via legal entities. In practise there is combination of both.

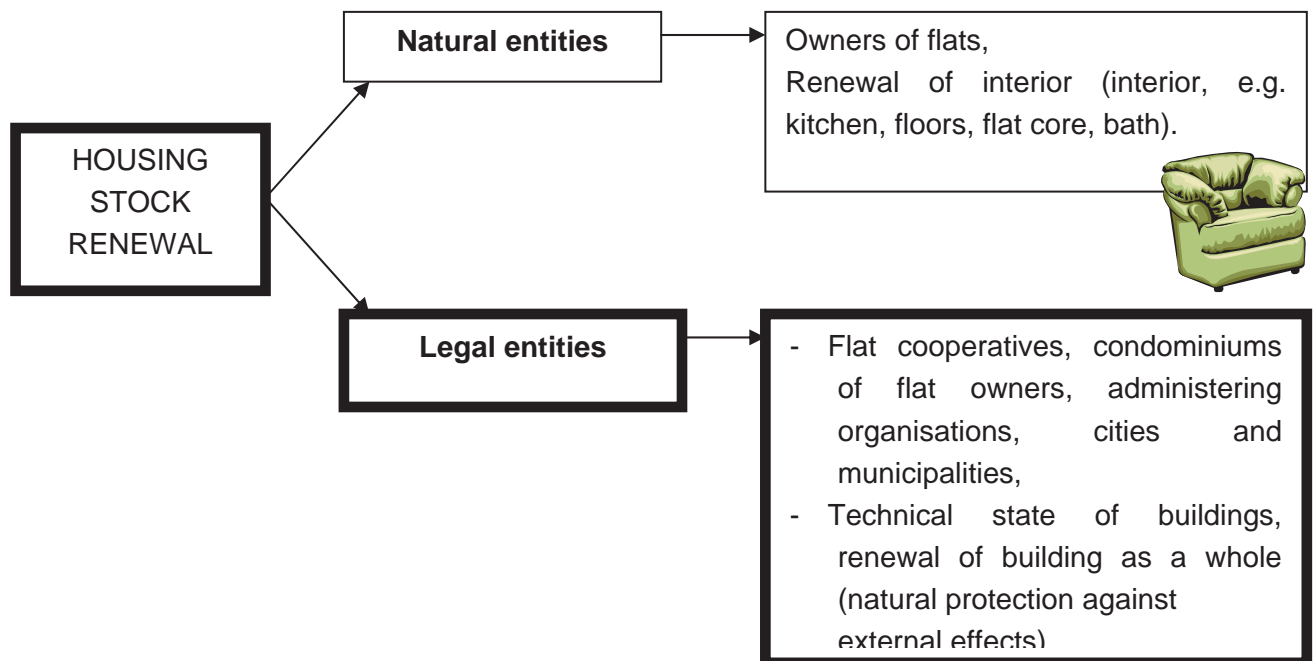
Natural entities are mostly flat owners, who are permanently inhabited in dwellings and focused on refurbishment in term of interior comfort. It means, that financial sources are used for interior renewal, mainly for rebuilding of housing core, kitchen, bathroom, and change of old windows, paving, etc. But they often forgot that house have also roof, facade, staircase or distribution canals. Natural entities realise that, when some damage is occurred, for example the roof is leaking or distribution canals are destroyed, which can cause their interior damage and the problem is occurred. This problem is necessary to solve. Because of that reason legal entities are important here. Among legal entities we include housing condominiums, housing co-operatives, housing management companies and municipalities, which are focused on refurbishment of housings in term of technical state and providing of appropriate conditions of a particular building as a whole. It means to create natural protection against external effects. Especially the legal entities represent an important factor within refurbishment of the housing stock, and therefore it is necessary to pay increased attention to them when considering financing of housing stock renewal and gaining of financial means for this purpose.

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<sup>1</sup> Budapest Case Study. Implementattion of Human Settlements Policies in Urban Renewal and Housing Modernization. Economic Commision for EUROPE, United Nations, New York and Geneva, 2000. p. 19-23.



Diagram 3.1: Housing stock renewal from the perspective of natural and legal entities

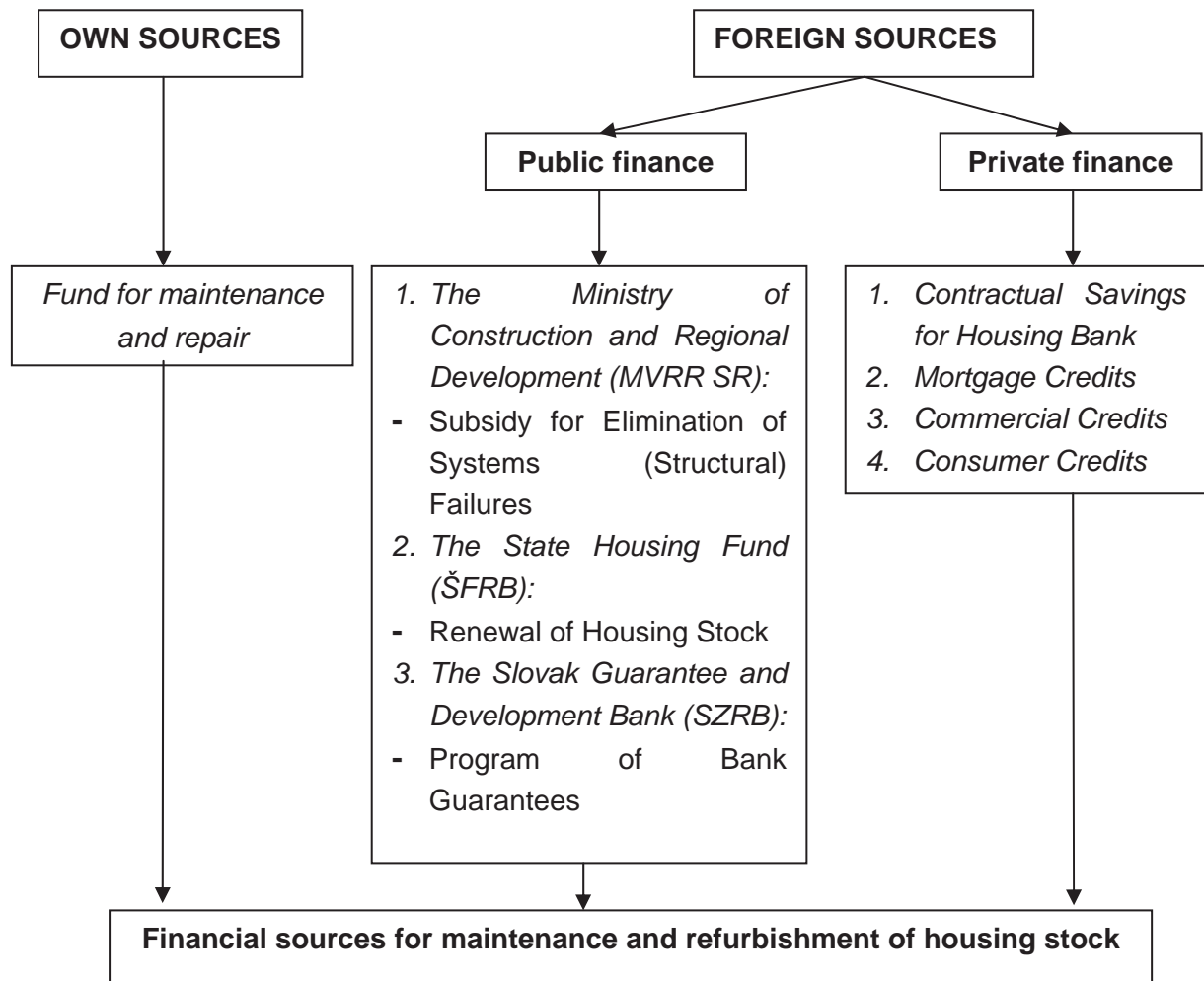


In general, it can be said that we divide sources of financing maintenance and renewal of housing stock in two fundamental groups, i.e. own sources, which are created by the fund of maintenance and repairs and foreign sources, which are further subdivided in public and private sources. Public sources of financing represent financial sources of state, which are supplied for the refurbishment of housing stock via the State Fund for Housing development or the Ministry (in SR the Ministry of Construction and Regional Development and in ČR the Ministry for Local Development). Among private sources we include financial sources for housing stock refurbishment available from banks active in the respective country, as e.g. building saving, mortgage credits or various types of commercial credits.





Diagram 3.2: Financial sources for maintenance and refurbishment of housing stock



### 3.1 FINANCING OF HOUSING STOCK REFURBISHMENT IN THE SLOVAK REPUBLIC

#### 3.1.1 The State Fund of Housing Development (ŠFRB)

The State Fund of Housing Development is objective state fund determined for financing of new flats construction and for development of existing housing stock. Conditions and the sum of rendering financial means from the Fund defines the Act No. 124/1996 Coll. on the State Fund of Housing Development as amended (hereinafter "ŠFRB"), the Regulation of the Government of SR No. 137/2000 Coll. on Programs of housing stock renewal in the wording of the Regulation of the Government of the Slovak republic No. 587/2001 Coll. and the Decree of the Ministry of Construction and Regional Development of the Slovak Republic No. 143/2000 Coll. on details of request content for rendering subsidy from means of ŠFRB, on technical conditions and on length of period for construction accomplishment. From the view of housing stock renewal mainly the following purposes are very interesting for this objective, generally called as Renewal of Multifamily House:

Thermal protection of the multifamily house.

Change of finished construction of the multifamily house and family house.

Elimination of static failure of the multifamily house.

#### Conditions – sum of subsidy and credit conditions:

Condominium, i.e. owners, who have interest in credit exhausting for the one of the mentioned three objectives, have to prove that they dispose of their own financial means or means of contractual savings for housing in the sum at least 20 % from the acquisition construction price for the purpose, for which the subsidy can be provided. As the own source it can never be considered bank credit or credit from saving bank. Exclusion is credit from a construction saving bank, which the construction saving bank render to its saver.<sup>1</sup> In 2005 the fund offers SKK 250 millions to interested persons.<sup>2</sup>

Table 3.1: Credit conditions for renewal of multifamily houses in year 2005 <sup>3</sup>

PURPOSE	Applicant	Height of credit	Discount	Maturity	Interest rate
Renewal of multifamily houses	Legal entities	80% ACC, max. 8 000 Sk/m <sup>2</sup>	60%	20 years	60% of Basic Interest Rate , but min. 2,7%

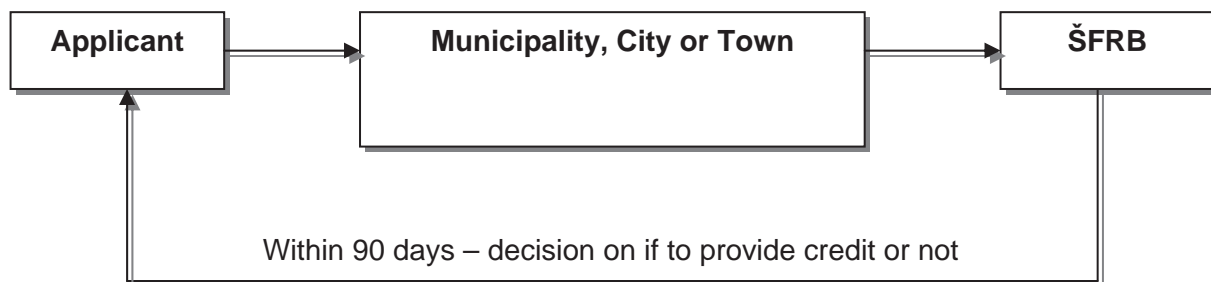
Remark: Credit is specified 60% from Basic Interest Rate of Slovak National Bank, which equal to Interest Rate for Two-weeks REPO Tenders and from the 1-st March 2005 it is 3% per annum.

<sup>1</sup> [www.build.gov.sk](http://www.build.gov.sk)

<sup>2</sup> [www.sfrb.sk](http://www.sfrb.sk)

<sup>3</sup> [www.sfrb.sk](http://www.sfrb.sk)

Diagram 3.3: The course of application for subsidy from 1 January 2004



Applicant submits written application to the Fund via municipality, which is seat of county, respective pursuant to location of the construction. Within 14 days from its submission, the municipality will verify completeness of the application requirements. The municipality will send the verified application to the fund within the period for verification. The fund carries out the evidence of the applications pursuant to the purpose and in the order according to date of their delivery to the fund. The fund will decide upon the providing of the subsidy within 90 days from the day of application delivery by the municipality. The fund will decide upon the providing of the subsidy pursuant to the order of delivered applications up to exhausting the sum assigned in the budget of the fund for the respective purpose and type of subsidy. The fund will send proposal of an agreement to the applicant within 30 days after deciding upon the providing of subsidy. If the subsidy will not be provided, the fund will announce it in written to the applicant within 30 days from the day of decision upon non-providing of the subsidy. There is no legal title for providing of means from the fund.<sup>1</sup>

### **3.1.2 Subsidy for Elimination of System (Structural) Failures**

The Ministry of Construction and Regional Development (MVRR) is a provider of the Subsidy for Elimination of Systems (Structural) Failures.

The subsidies for housing refurbishment are orientated not only to Municipalities nowadays, but also to housing co-operatives, condominiums, or to housing management companies. In the year 2005 it is valid new Bylaw No. V-1/2004 from 23 December 2004 on provide of subsidies to housing development. Regarding to elimination of System (structural) failures there is the fourth part of this bylaw with title: Subsidy for Elimination of System (Structural) Failures of multi-family houses.

Purpose of providing subsidy is to eliminate of failures, which use to occur in multi-family houses built as panel technology in specific types and in specific construction systems. System failures are those failures of multifamily houses, which have not been caused by the deferred maintenance or repairs, but by the construction technology used.<sup>2</sup>

The program provides a subsidy up to 50% of the acquisition construction costs (ACC), while limiting the absolute amount of the subsidy depending on a type of construction failure per m<sup>2</sup>,

<sup>1</sup> Zákon č. 607/2003 Z.z. o štátnom fonde rozvoja bývania, v znení zákona č. 536/2004 Z.z. /úplné znenie spracované MVRR SR/.

<sup>2</sup> Bylaw of MVRR SR No.4/2004 for providing subsidies to elimination of system failures.

i.e., 1 m<sup>2</sup> of external cladding, 1 m<sup>2</sup> of the thermally insulated area of the external cladding or a balcony.

Subsidy was possible to get, in the year 2003, up to 50% of acquisition construction costs, but for maximum 380 Sk/m<sup>2</sup> of floor area of all flats in multifamily house<sup>1</sup>. In the year 2004 it was 415 Sk/m<sup>2</sup> of floor area of all flats in multifamily house.<sup>2</sup> Nowadays, in the year 2005, it is possible to get for maximum 450 Sk/m<sup>2</sup> of floor area of all flats in multifamily house or of course up to 50% of acquisition construction costs.<sup>3</sup>

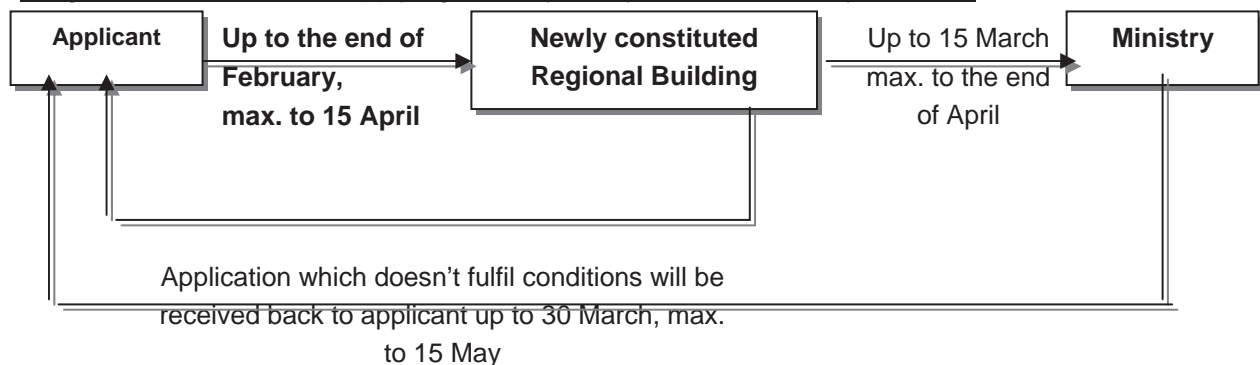
### How to apply?

Applicant has to show that he fulfilled following conditions. The main condition it is documentary of expertise, which is elaborated by authorized person, and which includes results of multi-family house diagnostics with description of structural failures, with the size and level of damages and suggestion of system failures elimination.<sup>4</sup>

Applicant could be every legal entity as: a housing co-operative, housing condominium, municipality or housing management company.

For acceptance and appraisal of application form it is Bylaw of MVRR SR No. 1/2005 from 25 January 2005. According to this bylaw the Ministry determines limit of subsidy for acceptance of application form and announces it to competent regional building offices up to 15 February every year. Regional building office goes through all application form up to the end of February. If there are some finance reserves, it could be up to the 15 April. The Regional Building Office has to judge and check all applications, whether they meet conditions or not. Then the Regional Building Office has to send only correct applications to the Ministry of Construction and Regional Development (MVRR SR), up to 15 March but maximum to the end of April. Then Ministry judge and check all applications and informs applicants whether they get subsidy or not.

Diagram 3.4: Process of applying subsidy for system failures in year 2005



<sup>1</sup> [www.build.gov.sk](http://www.build.gov.sk)

<sup>2</sup> <http://www.skreality.sk/index.php?rl=4&tn=771>

<sup>3</sup> The state give and lend finance for repairs of panel multifamily houses (Na opravu panelákov štát dá aj požičia). TREND, 26 February 2004, p. 24.

<sup>4</sup> [www.build.gov.sk](http://www.build.gov.sk)

### 3.1.3 Program of bank guarantees (SZRB)

The Slovak Guarantee and Development Bank, a.s., was established on 15-th of March 1991 by the Ministry of Finance. Its basic capital stock amounts to SKK 800 billion, and the state is the only shareholder. The bank owns the share in following institutions: *1.3% of the capital share of VÚB Factoring, a.s., and 0.98% of the capital share of the Slovak Banking and Clearing Center, a.s.*<sup>1</sup>

In the interests of involving more banking resources in the housing funding, the government has approved a guarantee housing loan program. This program guarantees Slovak Guarantee and Development Bank (Slovenská Záručná a Rozvojová Banka, a.s.) in co-operation with the Ministry of Construction and Regional Development. Housing loan guarantees may be provided to entrepreneurs or municipalities that develop the owner-occupied or rental housing units in multifamily houses. More specifically a bank guarantee pursuant this program may be provided for the refurbishment of multi-family houses.

Bank guarantee is possible to provide up to 100% of credit principal, which is no higher than acquisition construction costs (ACC) for refurbishment. Bank guarantee is possible to provide only in case if the height of credit per one flat is not lower than 7,000 SKK or not higher than 300,000 SKK.

Bank guarantee is according to height of credit per one flat following:<sup>2</sup>

Height of credit per one flat	Maturity date of bank guarantee
7 000 – 20 000	Up to 3 years
20 001 – 40 000	Up to 5 years
40 001 – 70 000	Up to 7 years
over 70 000	Up to 10 years

Applicants, who apply for state credits, don't have possibility to ask for bank guarantee from the Slovak Guarantee and Development Bank (SZRB), because the State can't guarantee to itself.<sup>3</sup>

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<sup>1</sup> Elbers, A. - Ivanička, K. - Szolgayová, E., - Lepeň, K., - Špirková, D., - Žárska, E., - Ifčíč, P.: Update of Slovak Housing Sector Profile. Slovak University of technology in Bratislava 2004.

<sup>2</sup> Program štátnej podpory obnovy bytového fondu formou poskytovania bankových záruk za úvery, SZRB. [www.szrb.sk](http://www.szrb.sk)

<sup>3</sup> Týždenník TREND: Na opravu panelákov štát dá aj požičia. 26. február 2004, s. 24.

Table 3.2: Survey of financial sources for housing stock refurbishment from public sources in Slovakia

			Height of subsidy	Own sources	Subsidy, state premium, bonus	Interest rate	Maturity date	
PUBLIC FINANCE	ŠFRB	Renewal of Housing Stock: 1. Thermal protection of multi-family house 2. Changes of finished building 3. Elimination of Systems (Structural) Failures	80% ACC, max. 8,000 Sk/m <sup>2</sup>	20% ACC	-	60% of Basic Interest Rate, but minimum 2,7%	20 years	
	MVRR	Subsidy for Elimination of Systems (Structural) Failures	50% of ACC subsidy, maximum 450 Sk/m <sup>2</sup>	50% ACC	50% of ACC subsidy	-	-	
	SZRB	Program of Bank Guaranties	100% of credit principal, 7,000 – 20,000 SKK pre one flat					Up to 3 years
			100% of credit principal, 20,001 – 40,000 SKK pre one flat					Up to 5 years
100% of credit principal, 40,001 – 70,000 SKK pre one flat					Up to 7 years			
100% of credit principal, Over 70,000 SKK pre one flat					Up to 10 years			

### 3.2 POSSIBILITIES OF FINANCING HOUSING STOCK RENEWAL IN THE CZECH REPUBLIC

In the Czech republic, similarly as in Slovakia, legal entities can use following sources of financing: the State fund of housing development (hereinafter “ŠFRB” - Program PANEL, providing of low-interest credits to municipalities for repairs and modernisation of housing stock), the Ministry for Local Development (hereinafter “MMR”) a Czech-Moravia Guarantee and Development Bank (hereinafter “ČMZRB”).

#### 3.2.1 The State Fund of Housing Development (ŠFRB)

The State Fund of Housing Development provides in the Czech republic for renewal of housing stock, i.e. multifamily houses built with panel technology, two basic programs:

Program PANEL,

Providing of low-interest credits to municipalities for repairs and modernisation of housing stock.

Program PANEL

The aim of the program is to make easier financing of complex repairs of multi-family houses built with panel technology including also improvement of their technical parameters.

The program contain three main instruments of support:

1. State subsidy as a % of interest rate  
Conditions of the State subsidy are adjusted in adjustment of government No. 299/2001 Coll. on use of financial sources from the State Fund of Housing Development and the State subsidy is as a % of interest rate from the credit provided by banks to legal entities for repairs or refurbishment of multi-family houses.
2. Bank guarantee  
To applicants, who don't dispose with sufficient guarantees, it is possible on the base of application form to provide bank guarantee from the Czech-Moravian Guarantee and Development Bank. The Guarantee is possible to obtain of maximum 70% of credit principal.
3. Specialistic technical aid  
In accordance with adjustment of government No. 299/2001 Coll. on use of financial sources from the State Fund of Housing Development it were established Consultant and information centres.  
Consultant and information centres provide:
  1. Standpoint to application for state subsidy to interest rate,
  2. Standpoint to application for bank guarantee
  3. Consultant and information activity<sup>1</sup>

#### Credits with low interest rates for Municipalities to their financial funds

Adjustment of government from 15 October 2001, No. 396/2001 Coll. on use of financial sources from the State Fund of Housing Development for repairs and refurbishment of houses, it allows to provide Credits with low interest rates for Municipalities to their financial funds. Interest rate of Credit is 3% per year during the whole period of repayment. Municipality obtains 50% of cost from the invoice every time when they submit invoice.<sup>2</sup>

### **3.2.2 Ministry of Spatial Development (MMR)**

The Ministry of Spatial Development (MMR) provides two programmes of housing stock refurbishment:

Program of providing financial support for repairs of panel buildings failures,

Program for block of multi-family houses regeneration

#### Program of providing financial support for repairs of panel buildings failures

The aim of the program is to help to owners of flats in multi-family houses built with panel technology in years from 1950 to 1990, to repair, maintain and refurbish of those buildings. Receivers of subsidy are owners of flats in multi-family houses, municipalities, housing co-operatives, housing condominiums and housing management companies. Subsidy is in the form of stright financial subsidy.

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<sup>1</sup> Adjustment of government No. 299/2001 Coll. on use of financial sources from the State Fund of Housing Development

<sup>2</sup> Adjustment of government from 15 October 2001, No. 396/2001 Coll. on use of financial sources from the State Fund of Housing Development for repairs and refurbishment of houses



Program for block of multi-family houses regeneration

Program for block of multi-family houses regeneration, which is also under the Ministry of Spatial Development, is instructed by Adjustment of government No. 494/2000 Coll. Here is also specified the height of subsidy for maximum 6 million CZK per one action. Subject of the program is to form conditions for change of block of panel multi-family house on multifunction units with better housing environment. Receiver of subsidy can be only those municipalities, where is the block of multifamily house with more than 150 flats.<sup>1</sup>

Table 9: Survey of financial sources for refurbishment of housing stock from public sources in Czech republic

		Height of subsidy	Own sources	Subsidy, state premium, bonus	Interest rate	Maturity date	
ČESKÁ REPUBLIKA	ŠFRB	1. State subsidy as a % of interest rate	Reduction of interest rates about 3%, or in some districts about 4 - 5%	-	3% of state subsidy to interest rate of credits provided by banks, or in some districts about 4-5%	Individual (specified by bank, which provides credit, minus 3%, or in some districts minus 4 -5%)	Individual (specified by bank, which provides credit)
		2. Bank guarantee	Maximum 70% of credit principal	-	-	ČMZRB makes decision	
		3. Specialistic technical aid	Consultant and information centres provide: 1. Standpoint to application for state subsidy to interest rate, 2. Standpoint to application for bank guarantee 3. Consultant and information activity				
		Credits with low interest rates for Municipalities to their financial funds	50% of ACC, Minimum 100 thousand CZK, maximum 25 million CZK,	Minimum 50% of own sources	-	3%	10 years
	MMR	Program of providing financial support for repairs of panel buildings failures	40% subsidy	60% own sources	40% subsidy	-	-
	Program of block of multi-family houses regeneration (for block of multi-family houses with minimum of 150 flats)	70% ACC	30% own sources of municipality	-	-	-	

ACC – Acquisition Construction Costs

<sup>1</sup> Adjustment of government No. 494/2000 Coll.

#### **4 RECOMENDATIONS FOR SLOVAKIA**

From the comparison of housing stock financing for refurbishment in Slovakia and in the Czech republic results, that Czech republic disposes with more possibilities of housing stock financing for refurbishment from public sources (the State Fund for Housing Development, the Ministry of Housing Development). In Slovakia it would be good to create such a Program of Refurbishment, which should also provide specialistic guidance in this sphere, such as it provides in Czech republic Program PANEL. Thereby it would be ensured higher flow of information for co-operative, condominiums, housing management companies and for municipalities, and it should eliminate problems, which use to be occurred by un-knowing of finance sources for refurbishment.

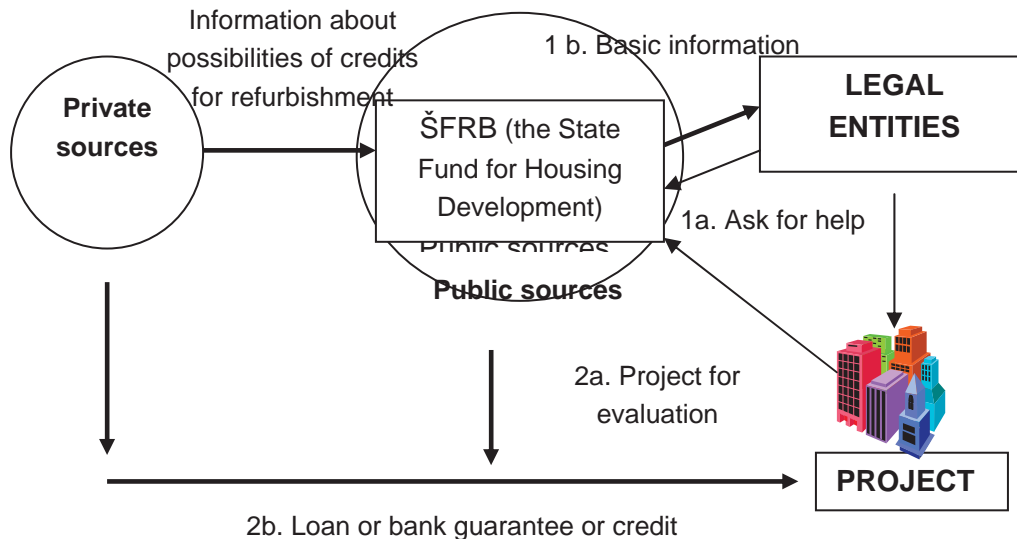
In Slovakia it is therefore necessary to inform persons (natural persons and legal persons) about possibilities of housing stock financing for refurbishment and of course to ensure information flow in this field. The State Fund for Housing Development should be good element to help in this sphere and it could operate in following forms:

To provide information about possibilities of housing stock financing for refurbishment to prospects (Condominiums, Co-operatives, Municipalities or to Housing Management Companies), which should help to speed up access to information and therefore to speed up the whole process of refurbishment of buildings.

To evaluate the project of building refurbishment received from prospects (Condominiums, Co-operatives, Municipalities or to Housing Management Companies) to Fund, and to recommend the most convenient use of financial sources from public or private sources to these prospects. It should be established on the base for which house refurbishment is the most necessary. The evaluation should be established on the base of point system, which scheme and suggestion is mentioned below. According to sum of points, the projects will be given to the order and the first projects will have priority in providing financial sources. While it will valid the rule: "More points, more finance from public sources." But nowadays it is valid the rule: "First comes, first takes", which is not effective.

## 4.1 SYSTEM OF NEW OPERATING OF FUND

Diagram 4.1: System of new operating of the State Fund for Housing Development according to following suggestion



Here are two main entities, the first there are legal entities, who need finance, and the second is the State Fund for Housing Development, which is a provider of finance and also provider of information about possibilities of financial sources in Slovakia.

The Fund should operate in two forms (as it was described above). In the first form, legal entities would like to know the possibilities of financial sources in Slovakia and therefore they 1.a Ask for help and the State Fund will provide them the 1.b Basic information. In the second form, legal entities have project for refurbishment of multi-family house and therefore they submit the project to the Fund (2.a project for evaluation) and then the project will be evaluated by the Fund via Point system (which is suggested below). Then on the base of points calculated through point system, it will depend amount of finance from the public finance sources. Missing finance would be completed from the bank credits.

## 4.2 POINT SYSTEM

Point system didn't be used up to the year 2004 in Slovakia. First suggestions of evaluation of buildings with point system uses The Ministry of Construction and Regional Development in Subsidy for Elimination of Systems Failures, which became valid in this year, 2005. Point system for the State Fund for Housing Development is not established yet and the rule is nowadays: "First comes, first takes". Therefore it is necessary to establish point system also for the State Fund for Housing Development, according to it will be projects evaluated and therefore the finance from public source will be used effectively!

The point system should be as follow:

#### 4.2.1 Category of buildings

The results show that rehabilitation is more likely in relatively small buildings with share of private ownership above 50 per cent. Private-ownership-dominated condominiums with fewer than 12-20 units have a good chance of starting a renovation programme. Building with 20-50 units are in a more difficult position and their type of common representative plays a significant role: a private person is usually more efficient in achieving a majority decision on renovation and its financing than management company. Condominiums in even more difficult positions regarding renovation are those with more than 50 units and those dominated by public ownership.

On the basis of these two major factors four main categories of building can be found. They would require different types of public intervention to overcome renovations difficulties.

For buildings in category A (fewer than 50 flats, majority owner-occupied), the main problem is the cooperation among owners in different financial positions. If there are few lower-income owners, it is possible to gain their cooperation with the help of means-tested subsidies (e.g. guarantee fund).

Buildings in category B (50 flats or more, majority of owner-occupied) seem to be too big to be able to achieve cooperation among owners. Here the possibility of creating smaller condominiums within the big buildings should be explored. (

Buildings in category C (fewer than 50 flats, minority owner-occupied) are rare because the majority of flats in smaller buildings are usually privately owned.

Buildings in category D (50 flats or more, minority owner-occupied) are in the worst condition and concentrate to lowest-income households. Here the most important thing would be to arrive at an ownership structure more favourable for renovation: either by increasing the share of private ownership about 50 per cent or "taking back" the whole building into public ownership (buying out those families that became owners).

There are no Categories of buildings in Slovakia; therefore it seems to be needful to introduce it also in Slovakia. Assigned points according to importance of refurbishment will be following:

- |               |           |
|---------------|-----------|
| 1. Category A | 20 points |
| 2. Category B | 15 points |
| 3. Category C | 10 points |
| 4. Category D | 5 points  |

#### 4.2.2 Monthly fees to the fund of operation, repairs and maintenance

Monthly fees to the fund of operation, repairs and maintenance will be calculated as average fees per last 6 months before giving application in to the Fund.

Per every 1 Sk/m<sup>2</sup>                      3 points

#### 4.2.3 Age of the building

Age of the building has influence to the maintenance and refurbishment of buildings. Good maintenance can prevent to great damages and also to prolong the lifetime of building. The necessity of maintenance is not identical during the building usage. New buildings don't need the maintenance, but in the second fourth of lifetime the necessity of maintenance is increasing rapidly. After one half of building lifetime it is massive need of maintenance and at the end of building lifetime it is need of large repairs and refurbishment of building. According to the age of

buildings the Ministry of Construction and Housing Development divides size of maintenance, repairs and refurbishment of buildings to following four groups:<sup>1</sup>

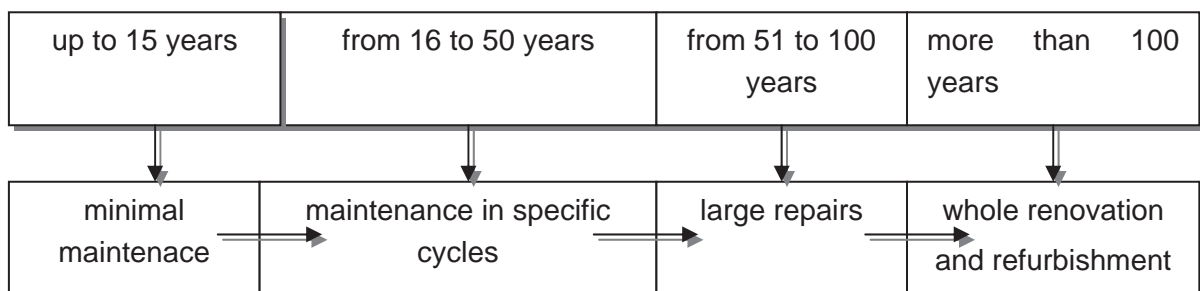
Up to 15 years,

From 16 to 50 years,

From 51 to 100 years,

More than 100 years.

Diagram 4.1: Maintenance, repairs and refurbishment of buildings according to their age



- Up to 15 years - 0,1 points per every year
- From 16 to 50 years - 0,3 points per every year over 15 years and up to 15 years 0,1 points per every year
- From 51 to 100 years, - 0,5 points per every year over 50 years, 0,3 points per every year over 15 years and up to 15 years 0,1 points per every year
- More than 100 years – 1 point per every year over 100 year, 0,5 points per every year over 50 years, 0,3 points per every year over 15 years and up to 15 years 0,1 points per every year

#### 4.2.4 Material type of building (brick house, panelled reinforced house)

According to planned lifetime of building are also assigned points. Planned lifetime for panelled reinforced houses is 80 years, while for brick houses it is longer, about 100 years. Therefore the points are assigned as follow:

Brick house	15 points
Panelled reinforced house	20 points

#### 4.2.5 Thermal isolation

Points are assigned according to thermal isolations of building. That means weather the thermal isolations are satisfactory or not, if they meet norm conditions. Points are assigned according to part of building which satisfy norm conditions.

If yes = 0 point, if not = 10 points:

Facade	No = 10 points, Yes = 0 point
Windows	No = 10 points, Yes = 0 point
Roof	No = 10 points, Yes = 0 point

<sup>1</sup> Metodická pomôcka na plánovanie cyklickej údržby a popráv v bytových domoch, MVRR SR, december 2003, str. 11-12.

#### 4.2.6 Heating

- Central heating (from the central source of heating) 20 points
- Own heating system in the house 10 points
- Own heating in the flat 0 point

As it was mentioned above, on the base of points calculated through point system, it will depend amount of finance from the public finance sources. Missing finance would be completed from the banks' credits.

The principle of evaluation will be following:

1. Maximum sum of points in points system is 100%.  
If the projects is evaluated as 100%, so all finance will be used from public sources. But there have to be the rule, as it is in the State Housing Fund that 20% of all acquisition construction costs have be used from own sources.
2. If there are fewer sums of points as a maximum, we have to calculate the percentage – how much per cent will it present from the maximum sum of points. Here have to be also the rule that 20% of all acquisition construction costs have be own sources. The remaining part, 80%, will be divided from the public sources and private sources according sum and the percentage of all points.

## CONCLUSION

This system would be needful in Slovakia, because then the expenditures from the State budget will be reduced, finance from public sources will be allocated fairly, for projects which the most need repairs, refurbishment and renewal will get finance as the first, and hereby they will be obtaining as convenient as possible, and last but not least there will be the bank sector supported. Therefore the whole system should be more effective.

## REFERENCES

- [1] DONNER, Ch.: Housing policies in the EU countries. Vienna 2000.
- [2] Elbers, A. - Ivanička, K. - Szolgayová, E., - Lepeň, K., - Špirková, D., - Žárska, E., - Ifčíč, P.: Update of Slovak Housing Sector Profile. Slovak University of technology in Bratislava 2004.
- [3] IVANIČKA, K. – ZÚBKOVÁ, M. – ŠPIRKOVÁ, D.: Housing policy. Editor STU, Bratislava 2002.
- [4] TYTYKALOVÁ, H.: Hardly gained experiences. Privatisation of socialistic housing stock, which brought absolutely new phenomenon for citizens, is being slowly ended today. Profit No. 44/2000.
- [5] Up-to date of the Housing Construction Development Concept. Approved by the resolution of the Government of SR No. 952/2003. MVRR SR
- [6] I. The Housing Construction Development Concept with Stress on Housing Stock Renewal. Approved by the Resolution of the Government of SR No. 1088 of 8 December. MVRR SR.

- [7] BUDAPEST Case Study. Implementattion of Human Settlements Policies in Urban Renewal and Housing Modernization. Economic Commision for EUROPE, United Nations, New York and Geneva, 2000.
- [8] The state gives and lends finance for repairs of panel multifamily houses (Na opravu panelákov štát dá aj požičcia). TREND, 26 February 2004.
- [9] The Slovak Statistical Office <[www.statistics.sk](http://www.statistics.sk)>
- [10] The Ministry of Construction and Regional Development <[www.build.gov.sk](http://www.build.gov.sk)>
- [11] The State Housing Fund of Slovakia <[www.sfrb.sk](http://www.sfrb.sk)>
- [12] Program of the state support for housing stock refurbishment in the form of Bank Guarantees, the Slovak Guarantee and Development Bank (SZRB) <[www.szrb.sk](http://www.szrb.sk)>
- [13] <<http://www.skreality.sk/index.php?rl=4&tn=771>>
- [14] Bylaw of MVRR SR No.4/2004 for providing subsidies to elimination of system failures.
- [15] Act No. 607/2003 Coll. on The State Housing Fund
- [16] Adjustment of government No. 299/2001 Coll. on use of financial sources from the State Fund of Housing Development in the Czech republic
- [17] Adjustment of government from 15 October 2001, No. 396/2001 Coll. on use of financial sources from the State Fund of Housing Development for repairs and refurbishment of houses in the Czech republic
- [18] Adjustment of government No. 494/2000 Coll. in the Czech republic
- [19] Methodical instrument for planning of cycle maintenance and repairs of multi-family buildings, MVRR SR, December 2003.