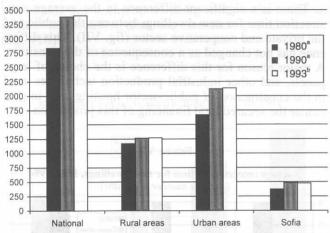
## III. HOUSING QUALITY AND CONSTRUCTION OF NEW DWELLINGS

#### A. The existing dwelling stock

By the end of 1993 the total dwelling stock in Bulgaria (used and vacant), contained 3,406,000 dwellings. The average yearly increase in the period 1980-1990 was 1.9 per cent.

#### FIGURE III

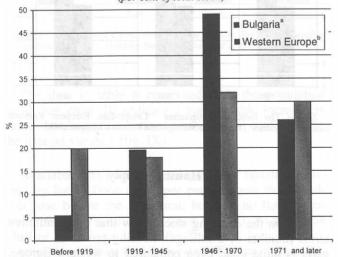
## Number of dwelling units, 1980-1993 (in thousands)



Sources: <sup>a</sup>Annual Bulletin of Housing and Building Statistics for Europe and North America, UN/ECE. <sup>b</sup> NSI, unpublished data.

#### FIGURE IV

## Dwelling stock by year of construction, 1993 (per cent of total stock)



Sources: <sup>a</sup>Annual Bulletin of Housing and Building Statistics for Europe and North America, UN/ECE. <sup>b</sup> Expert estimates based on Statistics on Housing in the European Community, The Hague, 1992.

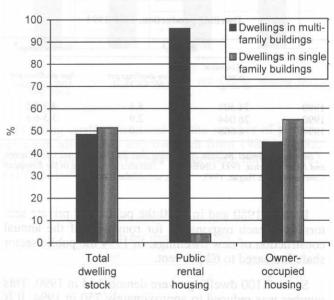
During the transition period 1990-1993, this average yearly increase fell back to 0.18 per cent. In Sofia, the total available housing stock even decreased during this period.

Compared to most western European countries, Bulgaria's dwelling stock is fairly new. Only 25 per cent of the total stock was built before 1945, about 26 per cent was built after 1970, while 49 per cent was completed in the period 1946-1970 (fig. IV).

The division of the existing dwelling stock by type of buildings shows significant differences between public rental and owner-occupied dwellings. Whilst, as could be expected, nearly 100 per cent of public rental dwellings are in multi-family buildings, surprisingly, as much as 45 per cent of owner-occupied housing is also found in this category. The active sale of public flats before and after the transition and the privatization process have contributed to this situation (fig. V).

FIGURE V

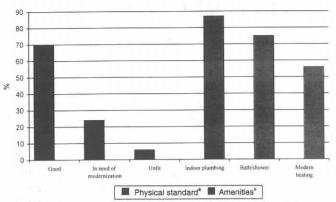
Dwelling stock by type of building and tenure, 1993



Source: The Indicators Programme, "Central-East European Regional Housing Indicators", Hungarian Metropolitan Research Institute (MRI).

There are at present no formal statistics or objective measurements of the physical standard of the dwelling stock in Bulgaria. Estimates by national experts indicate, however, that the general standard of the stock is quite high. This view is confirmed by available statistics on amenities (fig. VI).

# FIGURE VI Standard of dwelling stock, 1995 (per cent of total dwelling units)



Sources: <sup>a</sup> Expert estimates. <sup>b</sup> The Indicators Programme, ''Central-East European Regional Housing Indicators'', Hungarian Metropolitan Research Institute (MRI).

Note: The estimates on physical standard do not consider the repair and maintenance situation of the stock and are relative assessments.

#### B. New housing construction

New housing construction decreased sharply from 1980 to 1990 and fell further during the period of transition. The number of new dwellings completed in 1994 was 11.7 per cent of the level of new construction in 1980 (table 3).

TABLE 3

Dwelling production, 1980-1994

	Bulgaria <sup>a</sup>		Western Europe <sup>b</sup>	
'an	Annual increase in new dwellings	New dwellings per 1,000 inhabitants	New dwellings per 1,000 inhabitants	
1980	74 308	8.4	4.3-8.1	
1990	26 044	2.9	3.5-6.6	
1994 <sup>c</sup>	8 668	1.0		

Sources: <sup>a</sup> Annual Bulletin of Housing and Building Statistics for Europe and North America, 1993, UN/ECE. <sup>b</sup> Statistics on Housing in the European Community, The Hague, 1993. <sup>c</sup>NSI, unpublished data.

Both in 1980 and in 1990 the public and private sectors were each responsible for roughly half the annual construction of new dwellings. In 1994 the public sector share increased to 62 per cent.

Some 2,100 dwellings were demolished in 1990. This number was reduced to approximately 750 in 1994. It is estimated that most of this demolition took place in the private sector.

The average floor space of new dwellings increased gradually between 1980 and 1990. During the transition period average floor space has grown considerably faster (table 4). It is of interest to note that the markedly larger average dwelling size of new production in the private sector in 1980 and 1990 is not evident in 1994. This is probably due to the surprisingly sharp increase in the size of dwelling units produced by the public sector

during that year, and the decrease in the ability of the majority of the population to invest in private-sector housing.

TABLE 4

Average floor space of new dwellings in the private and public sector, 1980-1994

(square metres)

	Bulgaria			Western Europe <sup>b, c</sup>
	Private sector	Public sector	Total	Total
1980	64.1	54.3	59.0	
1990	78.6	64.9	71.6	69-135
1994	86.9	82.0	83.8	

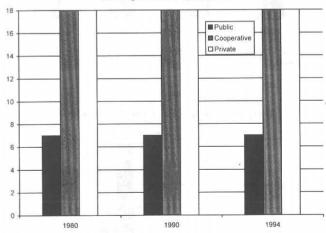
Sources: <sup>a</sup> The Indicators Programme, "Central-East European Regional Housing Indicators", Hungarian Metropolitan Research Institute (MRI). <sup>b</sup> Statistics on Housing in the European Community, The Hague, 1993. <sup>c</sup> Data refers to 1992.

There is a significant difference in the average construction time for new dwellings between the public and the private and cooperative sector (fig. VII). This difference has not changed as a consequence of the transition. A major reason for this difference is the choice of large panels, and other industrial production techniques used in the construction of public-sector housing, and in particular the secured total financing of this production.

FIGURE VII

Average construction time for new dwellings, 1980-1994

(average number of months)



Source: The Indicators Programme, "Central-East European Regional Housing Indicators", Hungarian Metropolitan Research Institute (MRI).

#### C. Housing supply

Data on the dwelling stock show that in quantitative terms (number of dwellings), housing provision in Bulgaria is quite good even compared to western Europe. The number of dwellings per thousand of population is not, however, in itself a satisfactory indicator of housing standards. As a result of the population development during the transition period, when the rural population

decreased considerably, data for the rural areas show a particularly high rate of dwellings per 1,000 inhabitants (table 5).

TABLE 5

Dwellings per 1,000 inhabitants, 1980-1994

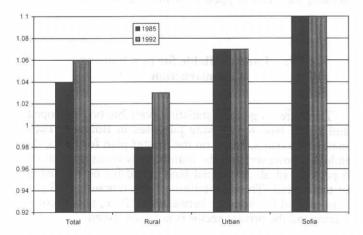
	Bulgaria <sup>a</sup>		Western Europe <sup>b, c</sup>	
	1980	1990	1994	
Total	321	391	405	390-460
Rural	355	443	469	
Urban	300	365	375	
Sofia	326	399	400	

Sources: <sup>a</sup> NSI, Statistical Yearbook, 1993—Population 1981, 1991, 1993. NSI bulletin, Housing Stock, 1980, 1990, 1993. <sup>b</sup> Statistics on Housing in the European Community, The Hague, 1992. <sup>c</sup> Data for 1990.

Since the total number of households decreased in the period 1980-1994, the development in the number of households per occupied dwelling reflects the collapse in new construction after the transition period started (fig. VIII).

FIGURE VIII

Households per occupied dwelling unit, 1985-1992



Sources: NSI, General Characteristics of the Housing Stock in the Republic of Bulgaria, 1988. NSI, Housing Stock and Standard of Living, 1989. Census data, 1992.

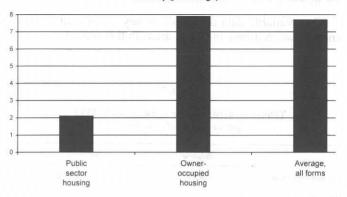
The data in table 6 combined with the population trend (see chap. II) indicate a considerable increase in vacant housing units in rural areas. This is confirmed by the data on vacancy (fig. IX).

Available data on the spatial quality of housing measured by living floor space per person show that standards rose before the transition, but that no further improvement has taken place since (fig. X). At the same time the spatial standard of the Bulgarian housing stock is much lower than that in western Europe, where this indicator varies between 26 and 43 m<sup>2</sup> per person.<sup>2</sup>

FIGURE IX

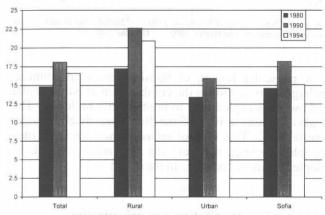
### Proportion of vacant housing units, 1994

Vacancy (percentage)



Source: NSI bulletin, Housing Stock.

FIGURE X
Living floor space per person, 1980-1994
(square metres)



Sources: NSI, Statistical Yearbook, 1994. NSI bulletin, Housing Stock, 1980, 1990, 1994.

Housing quality measured by the number of persons per room also shows improvement from 1985 to 1992, with no further improvement taking place between 1992 and 1994 (table 6).

TABLE 6
Persons per room, 1985-1994

The Control of the Co			
	1985 <sup>a</sup>	1992 <sup>b</sup>	1994 <sup>c</sup>
Total	1.2	1.0	1.0
Rural	1.0	0.8	
Urban	1.3	1.2	1.2
Sofia	1.3	1.2	

Sources: <sup>a</sup> NSI, General Characteristics of the Housing Stock in the Republic of Bulgaria, 1988. NSI, Housing Stock and Standard of Living, 1989. <sup>b</sup> Census data, 1992. <sup>c</sup> NSI, preliminary data.

#### D. Forms of tenure

The structure of tenure forms in the Bulgarian housing stock differs from that in the majority of countries in

<sup>&</sup>lt;sup>2</sup> Statistics on Housing in the European Community, The Hague, 1992.

transition or western European countries. The extremely low percentages of both public and private rental housing have significant consequences for the functioning of the housing market (table 7).

The available data do not show any significant difference between urban and rural areas in this regard.

TABLE 7

Tenure structure of the housing stock, 1993
(per cent of total dwellings)

	Bulgaria <sup>a</sup>	Western Europe <sup>b, c</sup>
Owner-occupied	90.3	40-70
Rental:		
—State and municipal	3.8	
—Departments and State		
enterprises	2.8	23-56
—Other public	0.2	
—Private rental	2.9	
Other		4-7

Sources: <sup>a</sup> NSI, Statistical Yearbook, 1993. <sup>b</sup> Statistics on Housing in the European Community, The Hague, 1992. <sup>c</sup> Data for 1990.

A particular feature of housing tenure in countries undergoing transition is the combination of public rental, and owner-occupied flats in multi-family buildings. This is also a characteristic of the Bulgarian dwelling stock (see table 7). This type of *mixed ownership* is an inescapable consequence of the privatization policies adopted by most countries in transition.

#### E. Restitution and privatization

The percentage of total dwelling stock which has been restituted to its owners during the transition period is not significant (table 9). All restitution of housing did, of course, take place in the public housing sector. As a

TABLE 8

Tenure forms in multi-family housing stock, 1994

Public rental	70 per cent
Owner-occupied	30 per cent

Source: The Indicators Programme, "Central-East European Regional Housing Indicators", Hungarian Metropolitan Research Institute (MRI).

TABLE 9

Restituted housing by end-1994
(share of total stock)

Total	0.35 per cent
7.7.77	
Rural	0.08 per cent
Urban	0.50 per cent
Sofia	1.16 per cent

Source: NSI, The Restitution in the Republic of Bulgaria, 1995.

share of this sector, restitution has been more significant, at approximately 12 per cent of the dwelling stock owned by the public sector in 1990.

There are no data available on the privatization of the dwelling stock during the transition period. Data for Sofia indicate that in the capital a total of approximately 10 per cent of public-sector housing there was sold to sitting tenants during 1991 and 1992. Privatization of housing has been stopped since the beginning of 1994.

## F. Land available for new housing construction

There are no general statistics available on developed and zoned land for housing purposes in Bulgaria. Estimates by experts, based on the master plan for Sofia, do indicate, however, that the municipality owns only about 5 per cent of all developed land zoned for new housing in the capital. The distribution of the remaining 95 per cent of land for housing between the State, public companies and the private sector is not established.

#### Summary of core issues

It must be underlined that Bulgaria's current dwelling stock can largely meet future demand. The quality and quantity of future housing are therefore crucially dependent on the way in which this present stock is preserved.

The available statistical data indicate that the existing dwelling stock is new, of a reasonably high standard and has acceptable amenities.

These statistics do, however, tend to cover up the large and rapidly increasing need for major repair and renovation existing in even the more modern parts of the stock. This is particularly the case for multi-family buildings where the choice of construction techniques and materials has led to a rapid deterioration and a need for investment in order to keep, and upgrade, their quality.

Such investment is presently not available in the public or the private sector. If further deterioration and eventual loss of dwelling stock are to be prevented, the availability of investment for repair and renovation should have the highest priority within the Government's housing policy. Such funds can become available only through a combination of rent increases, subsidized public funds and the creation of ordinary financial lending institutions in the housing sector. All of these elements are vital government policy responsibilities.

The production of new housing in Bulgaria virtually collapsed during the transition period. This development has been marginally more serious in the private than in the public sector.

The collapse of production of new housing in the public sector is a direct consequence of the low political priority given to housing during the transition period.

The collapse of production in the private sector seems mainly attributable to the lack of suitable financial institutions and instruments for new housing, and to the sharp reduction in purchasing power among the general population.

The resulting very low production of new housing, and hence low increase in the availability of housing, is assumed to be a major contributing factor in the changed pattern of in-country migration and the reduced rate of new household formation throughout the transition period.

A surprisingly high proportion of private-sector housing is found in multi-family buildings. This physical form of private ownership requires clear legal, organizational and administrative structures in order to function efficiently (see chap. VI).

It is somewhat surprising that the average size of new dwellings produced in the public sector increased markedly during the transition period. It is felt that the need for new dwelling stock, particularly in the urban areas, combined with the general low ability of the general population to pay real rent costs, should lead to a policy of creating a larger number of smaller dwellings. This does not seem to have happened so far.

A critical factor in the future production and price of new housing is the public availability of land for housing purposes. Although available data are limited to Sofia, the present situation there indicates the municipality's low ability to influence the volume of new production or the price of new housing by controlling land available for housing development.