

**Housing & Home Warranty Programs  
World Research**

**September 2005**

**Organization for Housing Warranty  
Japan**

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## Preface

Organization for Housing Warranty (OHW) carried out the first world research on housing and home warranty in 1997. This time, in commemoration of the 10th anniversary of the International Housing & Home Warranty Conference (Tokyo IHHWC), OHW has updated the research results, expanding its coverage to the housing situation and related basic data in 38 countries.

At the outset of this research, the delegation from OHW asked for the cooperation from the AEHWO (Association of European Home Warranty Organizations) when the conference was held in Stockholm in October 2002, which received offers of support from other participants. Encouraged by this support, OHW has set up a working group to conduct a research headed by Prof. Kohei Matsumoto, Department of Real Estate, Meikai University.

It is not easy to compare schemes from different countries on an equal footing. However, this collective information is expected to be used as a reference tool for further development of the scheme within these respective different countries. The panels exhibited on the conference site are the “At a glance” version of the research. Copies of these panels are also included in this CD-ROM.

It would not have been possible to have completed the research without the contribution from the following people, namely Mr. Murray Nugent from the Australian Home Warranty in Australia, Mr. Nigel Lilley from Builders Registration Board in Australia, Mr. Bob Maling from the Homeowner Protection Office in Canada, Mr. Bruno Nantel from APCHQ in Canada, Mr. David Ferguson from NHWP of Manitoba in Canada, Mr. Dennis Little from The Alberta New Home Warranty Program in Canada, Mr. Gregory Gee from Tarion Warranty Corporation in Canada, Mr. Keith Hanson from Saskatchewan Home Warranty in Canada, Mr. Pat Mulcahy from Atlantic Home Warranty Program in Canada, Mr. TONG YUE-ZHONG from The Center for Housing Industrialization Ministry of Construction in P.R. China, Mr. Raphael Slama from Qualitel in France, Mr. Eugene Farrel from HomeBond in Ireland, Mr. Kim Cham-Ho from the Korean Housing Institute in Korea, Mr. Frits Horvers from SWK in The Netherlands, Mr. Kjell Jutehammar from AB Bostadsgaranti in Sweden, Mr. Rod MacEachrane and Ms. Francesca Templeman from NHBC in the United Kingdom and Dr. W. E. Fluhr from the Home Buyers Warranty in United States of America. We are also indebted to the members of the Asian Forum. All of the above individuals were kind, helpful and courteous during the many communications that took place.

We firmly believe that this research is of great importance in providing a programatic understanding of housing warranties in the world, and will serve as an excellent reference point for the further development of these programs within each respective country.

We received a subsidy from the Ministry of Land, Infrastructure and Transportation to complete this research.

September 2005

Fukuo Ochi  
President, Organization for Housing Warranty

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Organization for Housing Warranty  
3F Akasaka Twin Tower Main Bldg.  
2-7-22 Akasaka Minato-ku Tokyo 107-0062  
Phone: +81-3-3584-5748  
[info@ohw.or.jp](mailto:info@ohw.or.jp)

September, 2005

# 1. Outline of research

## 1-1. Countries covered

The research covers a total of 38 countries, consisting of participants in past IHHWC, countries for which OHW has conducted research on housing warranty and those expected to participate in the tenth IHHWC.

1: Australia	11: India	21: New Zealand	31: Sweden
2: Belgium	12: Indonesia	22: Norway	32: Switzerland
3: Brazil	13: Ireland	23: Philippines	33: Thailand
4: Canada	14: Israel	24: Poland	34: Turkey
5: China	15: Italy	25: Portugal	35: Uganda
6: Croatia	16: JAPAN	26: Russia	36: United Kingdom
7: Denmark	17: Malaysia	27: Singapore	37: United States
8: Finland	18: Mexico	28: South Africa	38: Viet Nam
9: France	19: Nepal	29: South Korea	
10: Germany	20: Netherlands	30: Spain	

## 1-2. Research items

### (1) Housing conditions and other basic matters (applicable to all of the countries)

#### 1) Basic data

Population, area, population density, elderly population, number of households, average life expectancy, gross domestic product (GDP), GDP per person, number of construction employees, etc.

#### 2) Housing data

Housing stock, owner-occupied dwellings, number of dwelling per household, annual new construction, floor area, etc.

### (2) Housing warranty programs (applicable only to countries with warranty programs)

#### 1) List of housing warranty programs in the world

Year of program foundation, main program operators, prevalence, annual number of houses guaranteed, warranty period, freedom of program use, insurance back-up, home registration fees, etc.

#### 2) Outline of housing warranty programs in the world

Detailed description of housing warranty program, main program operator and outline of program in major agencies (coverage, details of warranty, quality control, home registration fees, records of program use, relation to insurance, handling of disputes, etc.)

## 1-3. Research methods

### (1) Research policy

Data are collected allowing for difference in level of detail from country to country.

No uniform rules are applicable to all countries in relation to the year of data collection and the source of data. Best efforts are made to collect the latest data and specify the source.

(Figures will be rounded to the level of basic data provided by the Ministry of Foreign Affairs when the research results are presented at the conference.)

Data on housing markets are collected and organized, and verified by the contact person in each country.

## **(2) Data collection**

### 1) Extraction from statistical data

"International statistical compendium 2004" prepared by the Statistics Bureau of the Ministry of Internal Affairs and Communications of Japan

Statistical data are summarized to help understand the population facts and economic, social and cultural conditions in other countries, compared with Japan's position in the world.

(Data are extracted mainly from statistical documents and websites of international organizations including the United Nations.)

Edited by the Statistical Training Institute, Statistics Bureau, Ministry of Internal Affairs and Communications of Japan.

Published by the Statistics Bureau, Ministry of Internal Affairs and Communications of Japan.

"Regional Affairs" prepared by the Ministry of Foreign Affairs of Japan

The Ministry of Foreign Affairs makes available basic data on countries throughout the world. Data are accessible via the website. Major data items are listed below.



General conditions	1. Area 2. Population 3. Capital 4. Ethnic groups 5. Languages 6. Religions 7. Average life expectancy 8. Literacy 9. College-going rate 10. Brief history
Government type and internal affairs	1. Government type 2. Head of state 3. Parliament 4. Cabinet 5. Internal affairs
Diplomacy and national defense	1. Basic diplomatic policy 2. Military strength
Economy	1. Major industries 2. GNP (in thousands of millions of US dollars) 3. GNP per person (in US dollars) 4. Economic growth rate (%) 5. Inflation rate (%) 6. Unemployment rate (%) 7. Total trade value (in thousands of millions of US dollars) 8. Trade items 9. Trading partners (in the order of share) 10. Exchange rate 11. Economic outlook
Economic cooperation	1. Records of Japanese assistance (cumulative total to 2000 of number of notes exchanged or number of JICA (Japan International Cooperation Agency) projects implemented in the case of technical assistance) 2. Key assistance areas (based on assistance programs for respective countries) 3. Records of assistance to major countries (Total net expenditure: 502 million dollars in 2000) 4. Other
Bilateral relationship with Japan	1. Political relationship 2. Economic relationship 3. Cultural relationship 4. Number of Japanese population in the country 5. Number of nationals of the country living in Japan 6. Mutual VIP visits (since 1998; positions at the time of visit are specified.) 7. Bilateral treaties or agreements

United Nations (UN Economic Commission for Europe: <http://www.unece.org/>)

Data on economic conditions in European countries are available at the website. (Major sources: Statistical documents or websites of international organizations including the United Nations.)

Data of organizations of countries throughout the world (websites)

Data are collected from the websites of embassies, or of public organizations to which were introduced through inquiries addressed to embassies. Data are accessed via websites of countries including the following.

### URL of website of statistical bureaus of countries throughout the world

Country	Statistics Bureau	URL	Notes
Australia	Australian Bureau of Statistics	<a href="http://www.abs.gov.au/">http://www.abs.gov.au/</a>	2001 Census of Population and Housing (Charge)
India	Census of India	<a href="http://www.censusindia.net/">http://www.censusindia.net/</a>	Census of India 2001
Indonesia	Badan Pusat Statistik (BPS-Statistics Indonesia)	<a href="http://www.bps.go.id/index.shtml">http://www.bps.go.id/index.shtml</a>	Population Statistics, Social Welfare Statistics (There is no related data.)
Malaysia	Department of Statistics Malaysia	<a href="http://www.statistics.gov.my/">http://www.statistics.gov.my/</a>	Population and Housing Census 2000 (Charge)
Mexico		<a href="http://www.inegi.gob.mx/inegi/default.asp">http://www.inegi.gob.mx/inegi/default.asp</a>	Neither in English nor in Japanese
Instituto Nacional de Estadística, Geografía e Informática (INEGI)	Statistics New Zealand	<a href="http://www.stats.govt.nz/">http://www.stats.govt.nz/</a>	2001 Census of population and dwellings
Philippines	<ul style="list-style-type: none"> <li>• National Statistical Coordination Board</li> <li>• National Statistical Office</li> </ul>	<a href="http://www.nscb.gov.ph/">http://www.nscb.gov.ph/</a>	Population of the Philippines Census (There is no related data.)
Singapore	Department of Statistics Singapore	<a href="http://www.singstat.gov.sg/index.html">http://www.singstat.gov.sg/index.html</a>	Household Statistics (There is no related data.)
South Africa	Statistics South Africa	<a href="http://www.statssa.gov.za/">http://www.statssa.gov.za/</a>	General household survey 2003
Thailand	National Statistical Office	<a href="http://www.nso.go.th/eng/index.htm">http://www.nso.go.th/eng/index.htm</a>	Population and Housing Census 2000
Uganda	Uganda Bureau of Statistics	<a href="http://www.ubos.org/">http://www.ubos.org/</a>	Population and Social Statistics 2002

Data are retrieved by accessing the website specifying such keywords as census, population, household or dwelling.

#### 2) Interviews with relevant people

A letter was sent to the embassy of the country in Japan to request cooperation, a telephone call was made and the embassy visited.

A letter was sent to the Japanese embassy in the country to request cooperation.

The contact person resident in Japan was interviewed for Ireland, Norway, New Zealand, China, South Africa, and the Republic of Korea, and direct contact was made in the following cases.

A separate interview was undertaken for Croatia.

The participants in the third Asian Forum\* held in December, 2004 were contacted by e-mail in April and May through the good offices of the Director for International Codes and Standards, Building Guidance Division, Housing Bureau, Ministry of Land, Infrastructure and Transport (MLIT).

\* Asian Forum is an international forum sponsored by Japan Ministry of Land, Infrastructure and Transport and Institute of International Harmonization for Building and Housing.

Over this gathering the professionals in the fields of housing and housing construction from public and private sectors in Asian countries exchange the information and experiences.

### **(3) Implementation of questionnaire surveys**

The questionnaire was sent to the contact person in each country. In a country without any point of contact, the questionnaire was sent to a housing warranty organization through the embassy. Questionnaires were prepared and answered in English.

#### 1) Countries with the past data on the housing warranty program

Surveys were conducted on housing warranty programs in eight countries.\* The working group sent these countries copies of an outline of the world's housing warranty programs that the working group prepared based on the past survey, and a list of general information including housing condition and matters related to housing warranty programs, and requested their modification.

\*Denmark, the UK, France, the Netherlands, Sweden, the USA, Canada and Australia

#### 2) Other countries

The working group requested countries other than the eight mentioned in 1) above to confirm a list that the working group prepared of basic matters related to housing conditions. The working group also sent copies of the outline of housing warranty programs in the eight countries mentioned in 1) above, and verified whether a housing warranty program exists or not in the country. If there exists a warranty program, the working group requested that the country prepare and submit an outline of the said program according to the examples of the eight countries. The working group identified the quality guarantee programs of the country, if any.

#### 3) Organization of responses to questionnaires

The working group compiled a report on the responses to questionnaires and addressed questions about unclear points to respondents whenever necessary.

## Setup for research

In early 2003 the working group to convey the world research was established with Professor Matsumoto of the Department of Real Estate Science, Meikai University, as a head and with Dr. Shuichi Matsumura and Mr. Tadashi Tonami as supervisors for data collection, questionnaire surveys, reporting on the research and preparation of results. Professor Matsumoto is well versed in the housing conditions and performance warranty programs in other countries.

### Members of Housing & Home Warranty Programs World Research Group

Leader	Kohei Matsumoto	Professor, Dept. of Real Estate, Meikai University	
Supervisor	Shuichi Matsumura	Associate Professor, Department of Architecture, Graduate School of Engineering, the University of Tokyo, Japan	
	Tadashi Tonami	Chief Research Engineer	Department of Housing & Urban Planning, Building Research Institute
OHW	Tetsuo Numaoi	Executive Director	Organization Housing Warranty (OHW)
	Shunichi Hokura	Managing Director	OHW
	Yasuo Suganuma	General Manager	OHW
	Nobuhiko Yamashita	Manager	OHW
	Osamu Matsumura	Manager	OHW
	Michiko Yamauchi	Senior Staff	OHW
	Reiko Sasaki	Chief Staff	OHW
Designer	Nobuko Inagaki		
Consultants	Ichiura Housing & Planning Associates Co. Ltd.		

## 2. Statistical Compendium for each Country

### 2-1. Research item

Research item list

Classification	Details	
Basic Data	• Country area (km <sup>2</sup> )	
	• Population	
	• Population density (person / km <sup>2</sup> )	
	• GDP per person (US\$)	
	• Households	
	• Average size of household	
	• Population of 65 years old and above (%)	
Housing Data	• Housing Stock	
	• Owned occupied dwellings (%)	
	• The number of dwellings per household	
	• Detached houses (%)	
	• Housing Starts	
	• Average floor space per dwelling (m <sup>2</sup> )	Stock
		Starts
	• Price index of dwellings (1985 = 100)	Stock
	Starts	

## 2-2. Data according to country

### Australia

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	*Country area (km <sup>2</sup> )	7,692,024	2005					○	Source: Mainly from ABS(Australian Bureau of Statistics)	
	*Population	200,000,000	2005					○	Source: Mainly from ABS(Australian Bureau of Statistics)	
	*Population density (person/km <sup>2</sup> )	2.5	2005					○	Source: Mainly from ABS(Australian Bureau of Statistics)	
	*GDP per person (US \$)	30,000	2005					○		
	*Households	7,500,000	2005					○	Source: Mainly from ABS(Australian Bureau of Statistics)	
	*Average size of household	2.5	2005					○	Source: Mainly from ABS(Australian Bureau of Statistics)	
	*Population of 65 years old and over(%)	12.5	2005					○	Source: Mainly from ABS(Australian Bureau of Statistics)	
Housing Data	*Housing Stock	7,300,000	2005					○	Source: Mainly from ABS(Australian Bureau of Statistics)	
	*Owned occupied dwellings(%)	73	2005					○	Source: Mainly from ABS(Australian Bureau of Statistics)	
	*The number of dwellings per household	1	2005					○	Source: Mainly from ABS(Australian Bureau of Statistics)	
	*Detached houses(%)	79.3	2005					○	Source: Mainly from ABS(Australian Bureau of Statistics)	
	*Housing Starts	150,000	2005					○	Source: Mainly from ABS(Australian Bureau of Statistics)	
	*Average floor space per dwelling (m <sup>2</sup> )	Stock	225	2005					○	Source: Mainly from ABS(Australian Bureau of Statistics)
		Starts	230	2005					○	Capital cities Source: Mainly from ABS(Australian Bureau of Statistics)
*Price index of dwellings (1985=100)	Stock	-	-							
	Starts	-	-							

### Belgium

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	*Country area (km <sup>2</sup> )	30,528	2000	○						
	*Population	10,372,000	2003		○					
	*Population density (person/km <sup>2</sup> )	339.8	2003		○					
	*GDP per person (US \$)	23,847	2002	○						
	*Households	4,084,000	2001		○					
	*Average size of household	2.4	2001		○					
	*Population of 65 years old and over(%)	16.7	1999	○						
Housing Data	*Housing Stock	4,084,000	2001		○				Data refer to occupied dwellings only.	
	*Owned occupied dwellings(%)	66.4	2001		○					
	*The number of dwellings per household	-	-							
	*Detached houses(%)	-	-							
	*Housing Starts	33,000	1998	○						
	*Average floor space per dwelling (m <sup>2</sup> )	Stock	368.0	2001		○				Data refer to average living floor space.
		Starts	197.5	1997		○				
*Price index of dwellings (1985=100)	Stock	188.0	2000			○			Public sales and sales by private contract of small and medium sized dwellings. Source: National Institute of Statistics(1998)	
	Starts	106.0	2000			○			ABEX index reflecting the average costs of payments for the various building stages. Source: Indice ABEX	

### Brazil

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	*Country area (km <sup>2</sup> )	8,514,215	2000	○						
	*Population	169,799,170	2000				○		Source: IBGN(Instituto Brasileiro de Geografia e Estatística), Demographic Census 2000	
	*Population density (person/km <sup>2</sup> )	20	2000	○						
	*GDP per person (US \$)	2,567	2001	○						
	*Households	34,735,000	1991	○						
	*Average size of household	3.4	1991				○		Pesquisa nacional por amostra de de domicílios 1999 [CD-ROM]. Microdados. Rio de Janeiro: IBGE, 2000. Source: IBGN(Instituto Brasileiro de Geografia e Estatística), Demographic Census 2000	
	*Population of 65 years old and over(%)	5.9	2000				○		Source: IBGN(Instituto Brasileiro de Geografia e Estatística), Demographic Census 2000	
Housing Data	*Housing Stock	44,795,101	2000				○		Source: IBGN(Instituto Brasileiro de Geografia e Estatística), Demographic Census 2000	
	*Owned occupied dwellings(%)	74.4	2000				○		Source: IBGN(Instituto Brasileiro de Geografia e Estatística), Demographic Census 2000	
	*The number of dwellings per household	-	-							
	*Detached houses(%)	89.3	2000				○		Source: IBGN(Instituto Brasileiro de Geografia e Estatística), Demographic Census 2000	
	*Housing Starts	-	-							
	*Average floor space per dwelling (m <sup>2</sup> )	Stock	-	-						
		Starts	-	-						
*Price index of dwellings (1985=100)	Stock	-	-							
	Starts	-	-							

Source 1 : International statistical compendium 2004, Statistics Bureau, Ministry of Internal Affairs and Communications

Source 2 : Bulletin of Housing Statistics for Europe and North America 2004, United Nations Economic Commission for Europe(URL: <http://www.unece.org/>) Last Upgrade: 08/18/2004.

Source 3 : Housing Statistics in the European Union 2002, Department of Housing of the Direction Générale of Planning, Housing and Heritage (DGATLP, <http://mrw.wallonie.be/dgatlp/HousingStats>)

Source 4 : Statistics Bureau of each country

Source 5 : Embassy and Others

## Canada

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	9,984,670	2000					○	Source: Natural Resources Canada, GeoAccess Division	
	•Population	31,630,000	2003		○					
	•Population density (person/km <sup>2</sup> )	3.2	2003		○					
	•GDP per person (US \$)	23,536	2002	○						
	•Households	12,021,000	2002					○	Source: Statistics Canada, Income Statistics Division	
	•Average size of household	2.5	2002					○	Source: Statistics Canada, Income Statistics Division	
Housing Data	•Population of 65 years old and over(%)	12.8	2003					○	Source: Statistics Canada, CANSIM: Table 051-0001	
	•Housing Stock	12,659,700	2002		○					
	•Owned occupied dwellings (%)	65.2	2002					○	Source: Statistics Canada, Income Statistics Division	
	•The number of dwellings per household	1.09	2001		○				Data is based on calculation: Dwellings(2001): 12,477,800, Households(2001): 11,563,000	
	•Detached houses (%)	56.8	2002					○	Source: Statistics Canada, Income Statistics Division	
	•Housing Starts	233,400	2005					○	Source: 2003 Canadian Housing Observer, Canada Mortgage and Housing Corporation	
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	120	2002					○	Source: Natural Resources Canada, Office of Energy Efficiency: Table-Residential Housing Stock and Floor
		Starts	-	-						
	•Price index of dwellings (1985=100)	Stock	-	-						
		Starts	-	-						

## China

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	9,600,000	2003				○		Source: National Bureau of Statistics of China	
	•Population	1,292,270,000	2003				○		Source: National Bureau of Statistics of China	
	•Population density (person/km <sup>2</sup> )	134	2002				○		Source: National Bureau of Statistics of China	
	•GDP per person (US \$)	955	2002	○						
	•Households	361,980,000	2003				○		Source: National Bureau of Statistics of China	
	•Average size of household	3.38	2003				○		Source: National Bureau of Statistics of China	
Housing Data	•Population of 65 years old and over(%)	8.5	2003				○		Source: National Bureau of Statistics of China Data is based on calculation	
	•Housing Stock * (m <sup>2</sup> )	8,911,146,000	2003				○		Source: National Bureau of Statistics of China Only city area	
	•Owned occupied dwellings (%)	80.17	2003					○	Source: Ministry of Construction/Only city area	
	•The number of dwellings per household	-	-							
	•Detached houses (%)	-	-							
	•Housing Starts	urban : 550,000,000m <sup>2</sup> /year rural : 752,000,000m <sup>2</sup> /year		2003				○		Source: National Bureau of Statistics of China
		•Average floor space per dwelling (m <sup>2</sup> )	Stock urban : 23.7m <sup>2</sup> /person rural : 27.2m <sup>2</sup> /person		2003			○		Source: National Bureau of Statistics of China
	•Price index of dwellings (1985=100)	Starts	22.8m <sup>2</sup> /person	2002					○	Source:Mr. Hao Bin
		Stock	-	-						
	•Price index of dwellings (1985=100)	Starts	-	-						
Stock		-	-							

## Croatia

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	56,594	2001					○	Source: Mr.Lenko Plestina.(2004/9/16)	
	•Population	4,437,460	2001					○	Source: Mr.Lenko Plestina.(2004/9/16)	
	•Population density (person/km <sup>2</sup> )	78.4	2001					○	Source: Mr.Lenko Plestina.(2004/9/16)	
	•GDP per person (US \$)	6,385	2003					○	GDP per capita Source: Mr.Lenko Plestina.(2004/9/16)	
	•Households	1,477,377	2001					○	Source: Mr.Lenko Plestina.(2004/9/16)	
	•Average size of household	2.99	2001					○	Source: Mr.Lenko Plestina.(2004/9/16)	
Housing Data	•Population of 65 years old and over(%)	15	2001					○	Source: Mr.Lenko Plestina.(2004/9/16)	
	•Housing Stock	1,660,649	2001					○	Dwelling units: (a) for permanent residence 1,660,649(2001), (b) Inhabited dwellings 1,421,623(2001) Source: Mr.Lenko Plestina.(2004/9/16)	
	•Owned occupied dwellings (%)	85.7	2001					○	Owner occupied dwellings (a): 85.7%(2001) Source: Mr.Lenko Plestina.(2004/9/16)	
	•The number of dwellings per household	1.12	2001					○	Dwellings per households (a): 1.12(2001), Dwellings per households (b): 0.96(2001) Source: Mr.Lenko Plestina.(2004/9/16)	
	•Detached houses (%)	56.1	2001					○	Detached houses: 932,093(2001) Source: Mr.Lenko Plestina.(2004/9/16)	
	•Housing Starts	19,549	2002					○	Source: Mr.Lenko Plestina.(2004/9/16)	
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	74.4	2001					○	Source: Mr.Lenko Plestina.(2004/9/16)
		Starts	85.9	2002					○	Source: Mr.Lenko Plestina.(2004/9/16)
	•Price index of dwellings (1985=100)	Stock	-	-						
		Starts	-	-						

Source 1: International statistical compendium 2004, Statistics Bureau, Ministry of Internal Affairs and Communications  
Source 2: Bulletin of Housing Statistics for Europe and North America 2004, United Nations Economic Commission for Europe (URL: <http://www.unece.org/>) Last Upgrade: 08/18/2004.  
Source 3: Housing Statistics in the European Union 2002, Department of Housing of the Direction Générale of Planning, Housing and Heritage (DGATLP, <http://mrw.wallonie.be/dgatlp/HousingStats>)  
Source 4: Statistics Bureau of each country  
Source 5: Embassy and Others

## Denmark

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	43,094	2000	○						
	•Population	5,368,400	2002		○					
	•Population density (person/km <sup>2</sup> )	124.6	2003		○					
	•GDP per person (US \$)	32,158	2002	○						
	•Households	2,409,000	2002		○				Exclusive household living in institutions, weekend cabin, etc.	
	•Average size of household	2.2	2002		○					
Housing Data	•Housing Stock	2,540,900	2002		○					
	•Owned occupied dwellings (%)	78.7	2002		○				Percent to total dwellings.	
	•The number of dwellings per household	1.10	2002		○				Data is based on calculation.	
	•Detached houses (%)	-	-							
	•Housing Starts	18,100	2002		○					
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	109.0	2002		○				Data refer to average living floor space.
		Starts	110.7	2002		○				Data refer to average living floor space.
	•Price index of dwellings (1985=100)	Stock	107.0	2001			○			Index of one-family houses. Source: Statistics Denmark and Ministry of Taxation regulating price index excluding profits and other fees. Source: Statistics Denmark
Starts		112.0	2001			○				

## Finland

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	338,145	2000	○				○	Source: Statistics Finland	
	•Population	5,210,000	2003		○			○	Source: Statistics Finland	
	•Population density (person/km <sup>2</sup> )	17.1	2003					○	persons/km <sup>2</sup> of land area Source: Statistics Finland	
	•GDP per person (US \$)	25,288	2002	○						
	•Households	2,354,000	2002		○			○	Source: Statistics Finland	
	•Average size of household	2.2	2002		○			○	Source: Statistics Finland	
Housing Data	•Population of 65 years old and over (%)	15.6	2003		○			○	Source: Statistics Finland	
	•Housing Stock	2,574,000	2002		○			○	Source: Statistics Finland	
	•Owned occupied dwellings (%)	57.7	2002					○	Source: Statistics Finland	
	•The number of dwellings per household	1.10	2002		○			○	Data is based on calculation. Source: Statistics Finland	
	•Detached houses (%)	40.2	2002		○			○	Source: Statistics Finland	
	•Housing Starts	27,000	2002		○			○	Source: Statistics Finland	
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	77.0	2002					○	Source: Statistics Finland
		Starts	89.3	2002		○			○	Data refer to average living floor space. Source: Statistics Finland
•Price index of dwellings (1985=100)	Stock	120.0	2001			○			Source: Statistics Finland	
	Starts	155.0	2001			○			construction cost index. Source: Statistics Finland	

## France

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	551,500	2000	○						
	•Population	59,770,000.0	2003		○					
	•Population density (person/km <sup>2</sup> )	108.4	2003		○					
	•GDP per person (US \$)	23,913	2002	○						
	•Households	24,525,000	2002		○					
	•Average size of household	2.4	2002		○					
Housing Data	•Population of 65 years old and over (%)	15.7	1998	○						
	•Housing Stock	29,495,000	2002		○					
	•Owned occupied dwellings (%)	56.0	2002		○					
	•The number of dwellings per household	1.20	2002		○				Data is based on calculation.	
	•Detached houses (%)	-	-							
	•Housing Starts	334,000	2002		○					
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	90.0	2002		○				
		Starts	112.6	2002		○				
•Price index of dwellings (1985=100)	Stock	165.0	2001			○			Acquisition by private individuals through a loan. Source: Indice INSEE Notaires créé en 1994 excluding fees and financial costs.	
	Starts	107.0	2001			○			Source: INSEE/ ICC (indice du coût de la construction)	

Source 1: International statistical compendium 2004, Statistics Bureau, Ministry of Internal Affairs and Communications  
Source 2: Bulletin of Housing Statistics for Europe and North America 2004, United Nations Economic Commission for Europe (URL: <http://www.unece.org/>) Last Upgrade: 08/18/2004.  
Source 3: Housing Statistics in the European Union 2002, Department of Housing of the Direction Générale of Planning, Housing and Heritage (DGATLP, <http://mrw.wallonie.be/dgatlp/HousingStats>)  
Source 4: Statistics Bureau of each country  
Source 5: Embassy and Others



## Germany

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes
Basic Data	•Country area (km <sup>2</sup> )	357,022	2000	○					
	•Population	82,474,700	2003		○				
	•Population density (person/km <sup>2</sup> )	231.0	2003		○				
	•GDP per person (US \$)	24,075	2002	○					
	•Households	35,873,000	2002		○				
	•Average size of household	2.2	2002		○				
Housing Data	•Population of 65 years old and over(%)	16	1999	○					
	•Housing Stock	38,924,800	2002		○				Data refer to dwellings in residential and non-residential buildings, except dwellings in residential homes.
	•Owned occupied dwellings (%)	40.8	1997		○				Percent to total dwellings.
	•The number of dwellings per household	1.05	2002		○				Data is based on calculation.
	•Detached houses (%)	-	-						
	•Housing Starts	289,600	2002		○				
	•Average floor space per dwelling (m <sup>2</sup> )	Stock 90.0 Starts 112.8	2002		○				Data refer to average living floor space.
	•Price index of dwellings (1985=100)	Stock - Starts -	-						

## India

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes
Basic Data	•Country area (km <sup>2</sup> )	3,287,263	2000	○					
	•Population	1,065,462,000	2003	○					
	•Population density (person/km <sup>2</sup> )	305	2000	○					
	•GDP per person (US \$)	487	2002					○	Source: HDR (Human Development Reports) 2004
	•Households	191,963,935	2001				○		Source: Census of India 2001, Census of India, <a href="http://www.censusindia.net/">http://www.censusindia.net/</a>
	•Average size of household	5.4	-					○	Source: Census of India 2001
Housing Data	•Population of 65 years old and over(%)	5.1	2002					○	Source: HDR (Human Development Reports) 2004
	•Housing Stock	179,275,605	2001				○		Source: Census of India 2001, Census of India, <a href="http://www.censusindia.net/">http://www.censusindia.net/</a>
	•Owned occupied dwellings (%)	urban 60 rural 92	2002					○	
	•The number of dwellings per household	0.93	2001					○	
	•Detached houses (%)	-	-						
	•Housing Starts	8,200,000	1997-2000					○	Source: NSS(National Sample Survey )
	•Average floor space per dwelling (m <sup>2</sup> )	Stock urban 37 rural 38 Starts 42	-					○	Source: NSS(National Sample Survey )
	•Price index of dwellings (1985=100)	Stock - Starts -	-					○	Source: NSS(National Sample Survey )

## Indonesia

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes
Basic Data	•Country area (km <sup>2</sup> )	1,904,569	2000	○					
	•Population	219,884,000	2003	○					
	•Population density (person/km <sup>2</sup> )	111	2000	○					
	•GDP per person (US \$)	678	2001	○					
	•Households	-	-						
	•Average size of household	-	-						
Housing Data	•Population of 65 years old and over(%)	-	-						
	•Housing Stock	-	-						
	•Owned occupied dwellings (%)	-	-						
	•The number of dwellings per household	-	-						
	•Detached houses (%)	-	-						
	•Housing Starts	-	-						
	•Average floor space per dwelling (m <sup>2</sup> )	Stock - Starts -	-						
	•Price index of dwellings (1985=100)	Stock - Starts -	-						

Source 1: International statistical compendium 2004, Statistics Bureau, Ministry of Internal Affairs and Communications  
Source 2: Bulletin of Housing Statistics for Europe and North America 2004, United Nations Economic Commission for Europe (URL: <http://www.unece.org/>) Last Upgrade: 08/18/2004.  
Source 3: Housing Statistics in the European Union 2002, Department of Housing of the Direction Générale of Planning, Housing and Heritage (DGATLP, <http://mrw.wallonie.be/dgatlp/HousingStats>)  
Source 4: Statistics Bureau of each country  
Source 5: Embassy and Others

## Ireland

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes
Basic Data	•Country area (km <sup>2</sup> )	70,280	2005					○	
	•Population	4,157,000	2005					○	
	•Population density (person/km <sup>2</sup> )	59.14	2005					○	
	•GDP per person (US \$)	29,840	2005					○	
	•Households	1,694,000	2005					○	
	•Average size of household	2.94	2005					○	
Housing Data	•Population of 65 years old and over(%)	11.4	2005					○	
	•Housing Stock	1,694,000	2005					○	
	•Owned occupied dwellings (%)	81.5	2005					○	
	•The number of dwellings per household	-	-						
	•Detached houses (%)	-	-						
	•Housing Starts	78,000	2005					○	
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	-	-					
•Price index of dwellings (1985=100)	Starts	88.4	2002		○				
	Stock	128.0	1995			○			including labour and materials. Source: Department of the Environment and Local
•Price index of dwellings (1985=100)	Starts	113.0	1995			○			

## Israel

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes
Basic Data	•Country area (km <sup>2</sup> )	22,145	2000	○					
	•Population	6,574,400	2002		○				
	•Population density (person/km <sup>2</sup> )	296.7	2003		○				
	•GDP per person (US \$)	16,303	2002	○					
	•Households	1,737,000	2000		○				
	•Average size of household	3.3	2000		○				
Housing Data	•Population of 65 years old and over(%)	9.8	2000	○					
	•Housing Stock	-	-						
	•Owned occupied dwellings (%)	-	-						
	•The number of dwellings per household	-	-						
	•Detached houses (%)	-	-						
	•Housing Starts	38,200	2002		○				
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	137.0	1996		○			Source: UNECE Environment and Human Settlements Division
•Price index of dwellings (1985=100)	Starts	120.1	1993		○				
	Stock	-	-						
•Price index of dwellings (1985=100)	Starts	-	-						

## Italy

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes
Basic Data	•Country area (km <sup>2</sup> )	301,318	2000	○					
	•Population	57,913,600	2001		○				
	•Population density (person/km <sup>2</sup> )	192.2	2003		○				
	•GDP per person (US \$)	20,601	2002	○					
	•Households	19,909,000	1991		○				
	•Average size of household	2.8	1991		○				
Housing Data	•Population of 65 years old and over(%)	17.8	1999	○					
	•Housing Stock	19,736,000	1991		○				Data refer to occupied dwellings only.
	•Owned occupied dwellings (%)	68.0	1991		○				
	•The number of dwellings per household	0.99	1991		○				Data is based on calculation.
	•Detached houses (%)	-	-						
	•Housing Starts	159,800	2000		○				Source: Environment and Human Settlements Division UNECE
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	81.1	2000		○			Source: Environment and Human Settlements Division UNECE
•Price index of dwellings (1985=100)	Starts	87.4	1997		○				
	Stock	195.0	1995			○			1988=100, price of dwellings in principal cities.
•Price index of dwellings (1985=100)	Starts	102.0	1990			○			including labour, inputs and transportation, 1999. Source: Normisma

Source 1: International statistical compendium 2004, Statistics Bureau, Ministry of Internal Affairs and Communications  
Source 2: Bulletin of Housing Statistics for Europe and North America 2004, United Nations Economic Commission for Europe (URL: <http://www.uncece.org/>) Last Upgrade: 08/18/2004.  
Source 3: Housing Statistics in the European Union 2002, Department of Housing of the Direction Générale of Planning, Housing and Heritage (DGATLP, <http://mrw.wallonie.be/dgatlp/HousingStats>)  
Source 4: Statistics Bureau of each country  
Source 5: Embassy and Others

**JAPAN (Reference data)**

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	377,873	2000	○						
	•Population	127,654,000	2003	○						
	•Population density (person/km <sup>2</sup> )	338	2003					○		
	•GDP per person (US \$)	31,277	2002	○						
	•Households	47,220,000	2003				○		Source: 2003 Housing and Land Survey of JAPAN Statistics Bureau Management and Coordination Agency Government of JAPAN	
	•Average size of household	2.7	2000	○						
Housing Data	•Population of 65 years old and over(%)	17.3	2000	○						
	•Housing Stock	53,890,000	2005					○	Source: 2003 Housing and Land Survey of JAPAN Statistics Bureau Management and Coordination Agency Government of JAPAN	
	•Owned occupied dwellings (%)	61.2	2003				○		Source: 2003 Housing and Land Survey of JAPAN Statistics Bureau Management and Coordination Agency Government of JAPAN	
	•The number of dwellings per household	1.14	2003				○		Source: 2003 Housing and Land Survey of JAPAN Statistics Bureau Management and Coordination Agency Government of JAPAN	
	•Detached houses (%)	56.5	2003				○		Source: 2003 Housing and Land Survey of JAPAN Statistics Bureau Management and Coordination Agency Government of JAPAN	
	•Housing Starts	1,193,038	2005					○		
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	94.9	2005					○	Source: 2003 Housing and Land Survey of JAPAN Statistics Bureau Management and Coordination Agency Government of JAPAN
		Starts	88.5	2005					○	
•Price index of dwellings (1985=100)	Stock	-	-							
	Starts	-	-							

**Malaysia**

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	329,758	2000	○						
	•Population	24,425,000	2003	○						
	•Population density (person/km <sup>2</sup> )	71	2000	○						
	•GDP per person (US \$)	3,960	2002	○						
	•Households	-	-							
	•Average size of household	-	-							
Housing Data	•Population of 65 years old and over(%)	3.9	-				○		Data is based on calculation. 65 years and over population: 964,000 persons. Source: Population and Housing Census 2000, Department of Statistics Malaysia, <a href="http://www.statistics.gov.my/">http://www.statistics.gov.my/</a>	
	•Housing Stock	-	-							
	•Owned occupied dwellings (%)	-	-							
	•The number of dwellings per household	-	-							
	•Detached houses (%)	-	-							
	•Housing Starts	-	-							
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	-	-						
		Starts	-	-						
•Price index of dwellings (1985=100)	Stock	-	-							
	Starts	-	-							

**Mexico**

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	1,958,201	2000	○						
	•Population	103,457,000	2000	○						
	•Population density (person/km <sup>2</sup> )	50.0	2000	○						
	•GDP per person (US \$)	6,249	2002	○						
	•Households	16,203,000	1990	○						
	•Average size of household	5.0	1990	○						
Housing Data	•Population of 65 years old and over(%)	4.4	1995	○						
	•Housing Stock	22,000,000	-					○	Source: Centro Impulsor de la Construcción y la Habitación,A.C.(CIHAC) Report	
	•Owned occupied dwellings (%)	-	-							
	•The number of dwellings per household	-	-							
	•Detached houses (%)	-	-							
	•Housing Starts	-	-							
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	-	-						
		Starts	-	-						
•Price index of dwellings (1985=100)	Stock	-	-							
	Starts	-	-							

Source 1: International statistical compendium 2004, Statistics Bureau, Ministry of Internal Affairs and Communications

Source 2: Bulletin of Housing Statistics for Europe and North America 2004, United Nations Economic Commission for Europe (URL: <http://www.unecp.org/>) Last Upgrade: 08/18/2004.

Source 3: Housing Statistics in the European Union 2002, Department of Housing of the Direction Générale of Planning, Housing and Heritage (DGATLP, <http://mrw.wallonie.be/dgatlp/HousingStats>)

Source 4: Statistics Bureau of each country

Source 5: Embassy and Others

## Nepal

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes
Basic Data	•Country area (km <sup>2</sup> )	147,181	2003					○	Source: Central Bureau of Statistics 2003
	•Population	23,151,423	2001					○	Source: Population Census 2001
	•Population density (person/km <sup>2</sup> )	157.29	2001					○	Source: Population Census 2001
	•GDP per person (US \$)	223	2002	○					
	•Households	4,253,220	2001					○	Source: Population Census 2001
	•Average size of household	5.4	2001					○	Source: Population Census 2001
Housing Data	•Population of 65 years old and over (%)	4.2	2001					○	Source: Population Census 2001
	•Housing Stock	-	-						
	•Owned occupied dwellings (%)	-	-						
	•The number of dwellings per household	-	-						
	•Detached houses (%)	-	-						
	•Housing Starts	-	-						
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	-	-					
	Starts	-	-						
•Price index of dwellings (1985=100)	Stock	-	-						
	Starts	-	-						

## Netherlands

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes
Basic Data	•Country area (km <sup>2</sup> )	41,526	2000	○					
	•Population	16,110,000	2002		○				
	•Population density (person/km <sup>2</sup> )	387.94	2005					○	
	•GDP per person (US \$)	26,001	2002	○					
	•Households	6,824,000	2000		○				
	•Average size of household	2.3	2000		○				
Housing Data	•Population of 65 years old and over (%)	13.8	2003	○					
	•Housing Stock	6,764,000	2002		○				
	•Owned occupied dwellings (%)	54	2005					○	
	•The number of dwellings per household	-	-						
	•Detached houses (%)	-	-						
	•Housing Starts	71,300	2002		○				
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	-	-					
Starts		-	-						
•Price index of dwellings (1985=100)	Stock	262.0	2001			○			Source: Nederlandse Vereniging van Makelaars (NVM)
	Starts	132.0	2001			○			Contract sum in year x for social rental dwelling y is compared to the fictitious contract sum in base year 1995. Source: Centraal Bureau voor de Statistiek: Maandstatistiek bouwrijpheid

## New Zealand

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes
Basic Data	•Country area (km <sup>2</sup> )	270,534	2000	○					
	•Population	3,876,000	2003	○					
	•Population density (person/km <sup>2</sup> )	14	2000	○					
	•GDP per person (US \$)	15,208	2002	○					
	•Households	1,344,267	2001				○		Source: 2001 Census of population and dwellings, Statistics New Zealand, <a href="http://www.stats.govt.nz/">http://www.stats.govt.nz/</a>
	•Average size of household	-	-						
Housing Data	•Population of 65 years old and over (%)	-	-						
	•Housing Stock	1,359,843	2001				○		Source: 2001 Census of population and dwellings, Statistics New Zealand, <a href="http://www.stats.govt.nz/">http://www.stats.govt.nz/</a>
	•Owned occupied dwellings (%)	67.8	2001				○		Source: 2001 Census of population and dwellings, Statistics New Zealand, <a href="http://www.stats.govt.nz/">http://www.stats.govt.nz/</a>
	•The number of dwellings per household	1.01	2001				○		Data is based on calculation. Source: 2001 Census of population and dwellings, Statistics New Zealand, <a href="http://www.stats.govt.nz/">http://www.stats.govt.nz/</a>
	•Detached houses (%)	81.3	2001				○		Data refer to separate House. Source: 2001 Census of population and dwellings, Statistics New Zealand, <a href="http://www.stats.govt.nz/">http://www.stats.govt.nz/</a>
	•Housing Starts	-	-						
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	-	-					
Starts		-	-						
•Price index of dwellings (1985=100)	Stock	-	-						
	Starts	-	-						

Source 1: International statistical compendium 2004, Statistics Bureau, Ministry of Internal Affairs and Communications  
Source 2: Bulletin of Housing Statistics for Europe and North America 2004, United Nations Economic Commission for Europe (URL: <http://www.uncece.org/>) Last Upgrade: 08/18/2004.  
Source 3: Housing Statistics in the European Union 2002, Department of Housing of the Direction Générale of Planning, Housing and Heritage (DGATLP, <http://mrw.wallonie.be/dgatlp/HousingStats>)  
Source 4: Statistics Bureau of each country  
Source 5: Embassy and Others

## Norway

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	323,877	2000	○						
	•Population	4,550,000	2003				○		Population as at 1st January of each year. Source: Population and housing census 2001, Statistics Norway 2002	
	•Population density (person/km <sup>2</sup> )	14.1	2003		○					
	•GDP per person (US \$)	42,234	2002	○						
	•Households	1,962,000	2001		○					
	•Average size of household	2.3	2001		○					
Housing Data	•Population of 65 years old and over(%)	11.5	2001				○		Data refer to 70years and older. Source: Population and housing census 2001, Statistics Norway 2002	
	•Housing Stock	1,985,300	2002		○					
	•Owned occupied dwellings (%)	76.7	2001		○					
	•The number of dwellings per household	1.00	2001		○				Data is based on calculation. Total stocks: 1,963,600(2001)	
	•Detached houses (%)	57.1	2001				○		Data refer to detached house or farm house. Source: Population and housing census 2001, Statistics Norway 2002	
	•Housing Starts	21,700	2002		○					
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	123.0	2001		○				Source: Environment and Human Settlements Division UNECE
		Starts	117.0	2002		○				
•Price index of dwellings (1985=100)	Stock	-	-							
	Starts	-	-							

## Philippines

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	300,000	2000	○						
	•Population	79,999,000	2003	○						
	•Population density (person/km <sup>2</sup> )	254	2000	○						
	•GDP per person (US \$)	992	2002	○						
	•Households	-	-							
	•Average size of household	-	-							
Housing Data	•Population of 65 years old and over(%)	-	-							
	•Housing Stock	14,891,127	2000				○		Data refer to occupied housing units. Source: Population of the Philippines Census, National Statistical Coordination Board, National Statistical Office, <a href="http://www.nscb.gov.ph/">http://www.nscb.gov.ph/</a>	
	•Owned occupied dwellings (%)	-	-							
	•The number of dwellings per household	-	-							
	•Detached houses (%)	-	-							
	•Housing Starts	-	-							
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	-	-						
		Starts	-	-						
•Price index of dwellings (1985=100)	Stock	-	-							
	Starts	-	-							

## Poland

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	323,250	1988	○						
	•Population	38,200,000	2003		○					
	•Population density (person/km <sup>2</sup> )	122.2	2003		○					
	•GDP per person (US \$)	4,901	2002	○						
	•Households	13,331,000	2002		○					
	•Average size of household	2.8	2002		○					
Housing Data	•Population of 65 years old and over(%)	11.95	1999	○						
	•Housing Stock	11,763,599	2002		○				Data refer to occupied dwellings only.	
	•Owned occupied dwellings (%)	66.7	2002		○					
	•The number of dwellings per household	0.88	2002		○				Data is based on calculation.	
	•Detached houses (%)	-	-							
	•Housing Starts	101,500	2001		○					
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	69.0	2002		○				
		Starts	99.3	2002		○				Source: UNECE Environment and Human Settlements Division
•Price index of dwellings (1985=100)	Stock	-	-							
	Starts	-	-							

Source 1: International statistical compendium 2004, Statistics Bureau, Ministry of Internal Affairs and Communications  
Source 2: Bulletin of Housing Statistics for Europe and North America 2004, United Nations Economic Commission for Europe (URL: <http://www.unece.org/>) Last Upgrade: 08/18/2004.  
Source 3: Housing Statistics in the European Union 2002, Department of Housing of the Direction Générale of Planning, Housing and Heritage (DGATLP, <http://mrw.wallonie.be/dgatlp/HousingStats>)  
Source 4: Statistics Bureau of each country  
Source 5: Embassy and Others

## Portugal

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes
Basic Data	•Country area (km <sup>2</sup> )	91,982	2000	○					
	•Population	10,410,000	2002		○				
	•Population density (person/km <sup>2</sup> )	113.1	2003		○				
	•GDP per person (US \$)	12,106	2002	○					
	•Households	3,620,000	2001		○				
	•Average size of household	3.1	1991	○					
Housing Data	•Population of 65 years old and over(%)	15.3	1999	○					
	•Housing Stock	5,225,000	2002		○				
	•Owned occupied dwellings (%)	75.7	2001		○				
	•The number of dwellings per household	-	-						
	•Detached houses (%)	-	-						
	•Housing Starts	121,800	2002		○				
	•Average floor space per dwelling (m <sup>2</sup> )	Stock 83.0	2001		○				Data refer to average living floor space.
	•Price index of dwellings (1985=100)	Starts 90.3	2002		○				
	Stock -	-							
	Starts -	-							

## Russian Federation

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes
Basic Data	•Country area (km <sup>2</sup> )	17,075,400	2000	○					
	•Population	143,530,000	2002		○				
	•Population density (person/km <sup>2</sup> )	8.4	2003		○				
	•GDP per person (US \$)	2,405	2002	○					
	•Households	57,297,000	1989	○					
	•Average size of household	2.6	1989	○					
Housing Data	•Population of 65 years old and over(%)	12.5	1999	○					
	•Housing Stock	2,818,000	2001		○				
	•Owned occupied dwellings (%)	56.8	1997		○				
	•The number of dwellings per household	-	-						
	•Detached houses (%)	-	-						
	•Housing Starts	396,400	2002		○				
	•Average floor space per dwelling (m <sup>2</sup> )	Stock -	-						
	•Price index of dwellings (1985=100)	Starts 85.3	2002		○				Data include area of balconies and loggias.
	Stock -	-							
	Starts -	-							

## Singapore

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes
Basic Data	•Country area (km <sup>2</sup> )	683	2000	○					
	•Population	4,252,000	2003	○					
	•Population density (person/km <sup>2</sup> )	6,049	2000	○					
	•GDP per person (US \$)	20,806	2002	○					
	•Households	-	-						
	•Average size of household	-	-						
Housing Data	•Population of 65 years old and over(%)	-	-						
	•Housing Stock	-	-						
	•Owned occupied dwellings (%)	-	-						
	•The number of dwellings per household	-	-						
	•Detached houses (%)	-	-						
	•Housing Starts	-	-						
	•Average floor space per dwelling (m <sup>2</sup> )	Stock -	-						
	•Price index of dwellings (1985=100)	Starts -	-						
	Stock -	-							
	Starts -	-							

Source 1: International statistical compendium 2004, Statistics Bureau, Ministry of Internal Affairs and Communications  
Source 2: Bulletin of Housing Statistics for Europe and North America 2004, United Nations Economic Commission for Europe (URL: <http://www.unecce.org/>) Last Upgrade: 08/18/2004.  
Source 3: Housing Statistics in the European Union 2002, Department of Housing of the Direction Générale of Planning, Housing and Heritage (DGATLP, <http://mrw.wallonie.be/dgatlp/HousingStats>)  
Source 4: Statistics Bureau of each country  
Source 5: Embassy and Others

## South Africa

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes
Basic Data	•Country area (km <sup>2</sup> )	1,221,037	2000	○					
	•Population	46,495,000	2003				○		Source:General household survey 2003, Statistics South Africa, <a href="http://www.statssa.gov.za/">http://www.statssa.gov.za/</a>
	•Population density (person/km <sup>2</sup> )	36	2000	○					
	•GDP per person (US \$)	2,329	2002	○					
	•Households	12,546,000	2003				○		Source:General household survey 2003, Statistics South Africa, <a href="http://www.statssa.gov.za/">http://www.statssa.gov.za/</a>
	•Average size of household	-	-						
Housing Data	•Population of 65 years old and over(%)	5.0	2003				○		Data is based on calculation. 65 years and over population: 2336000 persons. Source:General household survey 2003, Statistics South Africa, <a href="http://www.statssa.gov.za/">http://www.statssa.gov.za/</a>
	•Housing Stock	12,546,000	2003				○		Source:General household survey 2003, Statistics South Africa, <a href="http://www.statssa.gov.za/">http://www.statssa.gov.za/</a>
	•Owned occupied dwellings (%)	71.6	2003				○		Owned and fully paid off 7,736,000. Owned, but not yet fully paid off 1,242,000. Source:General household survey 2003, Statistics South Africa, <a href="http://www.statssa.gov.za/">http://www.statssa.gov.za/</a>
	•The number of dwellings per household	-	-						
	•Detached houses (%)	-	-						
	•Housing Starts	-	-						
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	-	-					
	Starts	-	-						
•Price index of dwellings (1985=100)	Stock	-	-						
	Starts	-	-						

## South Korea

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes
Basic Data	•Country area (km <sup>2</sup> )	99,585	2002					○	
	•Population	46,136,101	2000					○	
	•Population density (person/km <sup>2</sup> )	478	2002					○	
	•GDP per person (US \$)	10,059	2002					○	
	•Households	14,311,807	2000					○	
	•Average size of household	3.1	2000					○	
Housing Data	•Population of 65 years old and over(%)	7.3	2000					○	
	•Housing Stock	10,959,342	2000					○	
	•Owned occupied dwellings (%)	54.2	2000					○	
	•The number of dwellings per household	0.77	2000					○	Data is based on calculation.
	•Detached houses (%)	37.1	2000					○	
	•Housing Starts	585,382	2003					○	
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	62.8	2000				○	Data is average per household.
	Starts	-	-						
•Price index of dwellings (1985=100)	Stock	-	-						
	Starts	-	-						

## Spain

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes
Basic Data	•Country area (km <sup>2</sup> )	505,992	2000	○					
	•Population	40,550,000	2002		○				
	•Population density (person/km <sup>2</sup> )	80.1	2003		○				
	•GDP per person (US \$)	15,937	2002	○					
	•Households	10,586,000	1981	○					
	•Average size of household	3.5	1981	○					
Housing Data	•Population of 65 years old and over(%)	16.6	1999	○					
	•Housing Stock	20,823,000	2001		○				
	•Owned occupied dwellings (%)	58	1991		○				
	•The number of dwellings per household	-	-						
	•Detached houses (%)	-	-						
	•Housing Starts	417,800	2002		○				
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	-	-					
	Starts	96.1	2002		○				
•Price index of dwellings (1985=100)	Stock	186.0	2001			○			1987=100 Mortgage appraisals done by property appraisal companies. Source: INE: Consumer price indices; Ministry of Development: House price indices
	Starts	165.0	2001			○			1987=100, mortgage appraisals done by property appraisal companies. Source: INE: Consumer price indices; Ministry of Development: House price indices

Source 1: International statistical compendium 2004, Statistics Bureau, Ministry of Internal Affairs and Communications  
Source 2: Bulletin of Housing Statistics for Europe and North America 2004, United Nations Economic Commission for Europe (URL: <http://www.unecce.org/>) Last Upgrade: 08/18/2004.  
Source 3: Housing Statistics in the European Union 2002, Department of Housing of the Direction Générale of Planning, Housing and Heritage (DGATLP, <http://mrw.wallonie.be/dgatlp/HousingStats>)  
Source 4: Statistics Bureau of each country  
Source 5: Embassy and Others

## Sweden

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	449,964	2000	○						
	•Population	9,024,000	2005					○		
	•Population density (person/km <sup>2</sup> )	20.1	2005					○		
	•GDP per person (US \$)	20,576	2005					○		
	•Households	3,830,000	1990		○					
	•Average size of household	2.20	1990		○					
Housing Data	•Population of 65 years old and over(%)	17.32	1999	○						
	•Housing Stock	4,329,200	2002		○					
	•Owned occupied dwellings (%)	45.0	2005					○	Percent to total dwellings.	
	•The number of dwellings per household	-	-							
	•Detached houses (%)	-	-							
	•Housing Starts	27,000	2005					○		
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	89.0	2005					○	
		Starts	100.0	2005					○	
•Price index of dwellings (1985=100)	Stock	151.0	2001						estimates, Price index for owner-occupied one or two dwelling units; excluding co-operative building society dwellings.	
	Starts	165.0	2000						Figures for 2000 adjusted Source: Statistics Sweden	

## Switzerland

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	41,284	2000	○						
	•Population	7,350,000	2002		○					
	•Population density (person/km <sup>2</sup> )	178.0	2003		○					
	•GDP per person (US \$)	37,297	2002	○						
	•Households	2,842,000	1990	○						
	•Average size of household	2.6	2005					○		
Housing Data	•Population of 65 years old and over(%)	15.7	1999	○						
	•Housing Stock	3,638,200	2002		○					
	•Owned occupied dwellings (%)	-	-							
	•The number of dwellings per household	-	-							
	•Detached houses (%)	-	-							
	•Housing Starts	30,300	2002		○					
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	-	-						
		Starts	-	-						
•Price index of dwellings (1985=100)	Stock	-	-							
	Starts	-	-							

## Thailand

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	513,115	2000	○						
	•Population	62,833,000	2003	○						
	•Population density (person/km <sup>2</sup> )	121	2000	○						
	•GDP per person (US \$)	2,034	2002	○						
	•Households	15,662,300	2000				○		Data refer to privated households. Source: Population and Housing Census 2000, National Statistical Office, <a href="http://www.nso.go.th/eng/index.htm">http://www.nso.go.th/eng/index.htm</a>	
	•Average size of household	-	-							
Housing Data	•Population of 65 years old and over(%)	6.1	2000				○		Data is based on calculation: Total Population: 60,617,200, 65 years and over population: 3,714,900 Source: Population and Housing Census 2000, National Statistical Office, <a href="http://www.nso.go.th/eng/index.htm">http://www.nso.go.th/eng/index.htm</a>	
	•Housing Stock	15,662,300	2000				○			
	•Owned occupied dwellings (%)	81.2	2000				○		Source: Population and Housing Census 2000, National Statistical Office, <a href="http://www.nso.go.th/eng/index.htm">http://www.nso.go.th/eng/index.htm</a>	
	•The number of dwellings per household	-	-							
	•Detached houses (%)	79.7	2000				○		Source: Population and Housing Census 2000, National Statistical Office, <a href="http://www.nso.go.th/eng/index.htm">http://www.nso.go.th/eng/index.htm</a>	
	•Housing Starts	-	-							
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	-	-						
		Starts	-	-						
•Price index of dwellings (1985=100)	Stock	-	-							
	Starts	-	-							

Source 1: International statistical compendium 2004, Statistics Bureau, Ministry of Internal Affairs and Communications  
Source 2: Bulletin of Housing Statistics for Europe and North America 2004, United Nations Economic Commission for Europe (URL: <http://www.unecce.org/>) Last Upgrade: 08/18/2004.

Source 3: Housing Statistics in the European Union 2002, Department of Housing of the Direction Générale of Planning, Housing and Heritage (DGATLP, <http://mrw.wallonie.be/dgatlp/HousingStats>)

Source 4: Statistics Bureau of each country

Source 5: Embassy and Others



## Turkey

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	769,604	2003					○	Source: Turkey's Statistical Yearbook 2003, State Institute of Statistics Prime Ministry Republic of Turkey	
	•Population	67,803,927	2000					○	Source: The General Population Censuses 2000, State Institute of Statistics Prime Ministry Republic of Turkey	
	•Population density (person/km <sup>2</sup> )	88.0	2000					○	Source: Turkey's Statistical Yearbook 2003, State Institute of Statistics Prime Ministry Republic of Turkey	
	•GDP per person (US \$)	2,604	2002	○						
	•Households	15,070,093	2000					○	Source: Turkey's Statistical Yearbook 2003, State Institute of Statistics Prime Ministry Republic of Turkey	
	•Average size of household	4.50	2000					○	Source: Turkey's Statistical Yearbook 2003, State Institute of Statistics Prime Ministry Republic of Turkey	
Housing Data	•Population of 65 years old and over (%)	8.83	2000					○	Source: Turkey's Statistical Yearbook 2003, State Institute of Statistics Prime Ministry Republic of Turkey	
	•Housing Stock	16,235,830	2000					○	Source: Turkey's Statistical Yearbook 2003, State Institute of Statistics Prime Ministry Republic of Turkey	
	•Owned occupied dwellings (%)	70.9	1994	○						
	•The number of dwellings per household	1.08	2000					○	Data is based on calculation. Source: Turkey's Statistical Yearbook 2003, State Institute of Statistics Prime Ministry Republic of Turkey	
	•Detached houses (%)	-	-							
	•Housing Starts	161,491	2002					○	Source: Turkey's Statistical Yearbook 2003, State Institute of Statistics Prime Ministry Republic of Turkey	
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	95.0	1994	○					
		Starts	133	2002					○	Source: Turkey's Statistical Yearbook 2003, State Institute of Statistics Prime Ministry Republic of Turkey
•Price index of dwellings (1985=100)	Stock	-	-							
	Starts	-	-							

## Uganda

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	241,038	2000	○						
	•Population	25,827,000	2003	○						
	•Population density (person/km <sup>2</sup> )	92	2000	○						
	•GDP per person (US \$)	240	2002	○						
	•Households	-	-							
	•Average size of household	-	-							
Housing Data	•Population of 65 years old and over (%)	4.7	2002				○		Source: Population and Social Statistics 2002, UBOS(Uganda Bureau of Statistics), <a href="http://www.ubos.org/">http://www.ubos.org/</a>	
	•Housing Stock	-	-							
	•Owned occupied dwellings (%)	-	-							
	•The number of dwellings per household	-	-							
	•Detached houses (%)	-	-							
	•Housing Starts	-	-							
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	-	-						
		Starts	-	-						
•Price index of dwellings (1985=100)	Stock	-	-							
	Starts	-	-							

## United Kingdom

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	242,900	2000	○						
	•Population	59,230,000	2002		○					
	•Population density (person/km <sup>2</sup> )	243.8	2003		○					
	•GDP per person (US \$)	26,524	2002	○						
	•Households	25,074,000	2002		○					
	•Average size of household	2.4	2002		○					
Housing Data	•Population of 65 years old and over (%)	15.6	1999	○						
	•Housing Stock	25,617,000	2002		○					
	•Owned occupied dwellings (%)	-	-							
	•The number of dwellings per household	1.02	2002		○				Data is based on calculation.	
	•Detached houses (%)	-	-							
	•Housing Starts	25,617,000	2005					○		
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	87.0	2001		○				
		Starts	-	-						
•Price index of dwellings (1985=100)	Stock	180.0	2001			○			Trend in prices of previously occupied dwellings from Survey of Mortgage Lenders; adjusted for type of property. Source: Office of the Deputy Prime Minister	
	Starts	181.0	2001			○			Trend in prices of new dwellings from Survey of Mortgage Lenders; adjusted for type of property. Source: Office of the Deputy Prime Minister	

Source 1: International statistical compendium 2004, Statistics Bureau, Ministry of Internal Affairs and Communications  
Source 2: Bulletin of Housing Statistics for Europe and North America 2004, United Nations Economic Commission for Europe (URL: <http://www.unecp.org/>) Last Upgrade: 08/18/2004.  
Source 3: Housing Statistics in the European Union 2002, Department of Housing of the Direction Générale of Planning, Housing and Heritage (DGATLP, <http://mrw.wallonie.be/dgatlp/HousingStats>)  
Source 4: Statistics Bureau of each country  
Source 5: Embassy and Others

### United States

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	9,631,418	2003	○					Population data are mid-year estimates witch include forces overseas.	
	•Population	290,810,000	2003		○					
	•Population density (person/km <sup>2</sup> )	30.0	2005					○		
	•GDP per person (US \$)	35,891	2002	○						
	•Households	102,803,000	2001		○					
	•Average size of household	2.6	2001		○					
Housing Data	•Population of 65 years old and over(%)	12.7	1998	○						
	•Housing Stock	116,038,000	2001		○					
	•Owned occupied dwellings(%)	66.9	1999		○					
	•The number of dwellings per household	1.13	2001		○				Data is based on calculation.	
	•Detached houses(%)	-	-							
	•Housing Starts	1,648,400	2002		○					
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	162.0	2001		○				
		Starts	194.9	2002		○				
	•Price index of dwellings (1985=100)	Stock	-	-						
Starts		-	-							

### Viet Nam

Classification	Details	Data	Year	Source1	Source2	Source3	Source4	Source5	Notes	
Basic Data	•Country area (km <sup>2</sup> )	331,689	2000	○						
	•Population	81,377,000	2003	○						
	•Population density (person/km <sup>2</sup> )	234	2000	○						
	•GDP per person (US \$)	-	-							
	•Households	-	-							
	•Average size of household	-	-							
	•Population of 65 years old and over(%)	-	-							
Housing Data	•Housing Stock	-	-							
	•Owned occupied dwellings(%)	-	-							
	•The number of dwellings per household	-	-							
	•Detached houses(%)	-	-							
	•Housing Starts	-	-							
	•Average floor space per dwelling (m <sup>2</sup> )	Stock	-	-						
		Starts	-	-						
	•Price index of dwellings (1985=100)	Stock	-	-						
Starts		-	-							

Source 1: International statistical compendium 2004, Statistics Bureau, Ministry of Internal Affairs and Communications  
Source 2: Bulletin of Housing Statistics for Europe and North America 2004, United Nations Economic Commission for Europe (URL: <http://www.unecce.org/>) Last Upgrade: 08/18/2004.  
Source 3: Housing Statistics in the European Union 2002, Department of Housing of the Direction Générale of Planning, Housing and Heritage (DGATLP, <http://mrw.wallonie.be/dgatlp/HousingStats>)  
Source 4: Statistics Bureau of each country  
Source 5: Embassy and Others

### **3. Home Warranty Schemes in the World**

Kohei Matsumoto  
Professor, Department of Real Estate, Meikai University, Japan

#### **3-0. Introduction (consumer protection in housing)**

One of the most important policy subjects in the free nations is to establish a "small government". This policy is based on the Market Principle. According to this principle, adjustment of the various activities of the human being brings about better results by markets than governments. The "deregulation" and "privatization" have the same root.

By the way, the traditional housing policies have a function of "the redistribution of income" by a good standard housing by the governmental interventions. The house rent control is also a kind of "redistribution of income" through rental agreements. Under the market principle, the rationality of these housing policies is obviously denied except in some limited fields.

On the contrary, the home warranty scheme, the main theme of this paper which manages (prevents and remedies) risks in housing, is not always deemed to be a housing policy. The intervention of government is very small in this field, although it is sufficiently reasonable, as described later, according to the market principle. However, the history of the warranty scheme goes back to the ancient age B.C. 18<sup>th</sup> (Code of Hammurabi). This code is the oldest formal law which set down a warranty against defects of buildings.

In this paper, the need, validity and composition of the home warranty scheme will be analyzed mainly from points of view of the market theory, building technology and constitution of a system.

At first, the need of the consumer protection in housing will be discussed considering the characteristics of a building. And consumer's risks in housing would become clear. Second, a traditional legal background is going to be discussed. And limitation of a normal contract would be pointed out. In addition, the discussion will find out that using professionals in order to prevent defects would not help warrant a house.

Third, the consumers' movement will be shortly explained. Fourth, countermeasures against the risks in housing (consumer protection measures) would be described. Finally, a composition of home warranty scheme will be proposed.

My writing should be of your help to understand the various warranty schemes in the world edited from the next chapter.

#### **3-1 The Need of the Consumer Protection in Housing**

An acquisition (buying or constructing a house) of a house could be the highest expense for most people. If a serious defect is found in the house after the reception and no warranty could be obtained for the reparation, a family would consequently suffer an irrecoverable loss. Therefore, consumers these days are making strong demands not only for a reliable house building but also for a long-term warranty. In other words, the consumer is willing to pay more to a risk-free house.

When we talk about a defect, many of you will probably expect that the term "defect" should first be defined before discussion. In fact, whether or not a certain phenomenon is taken as a defect always becomes very critical.

However, here, in order to analyze the issue of the need of the consumer protection in housing, I would like to start without a definition. Because the definition of defect would be analyzed later and you will learn that a definition by many words would not be effective for a consumer protection.

A defective house building is one of the largest issues in the consumer protection.

However, the risks that consumers are exposed to are not only defect, and I would like to consider those risks by pointing out the characteristics of a building.

### **3-1-1 Characteristics of Buildings (hypotheses)**

Before proceeding to the explanation below, let me make some definitions. The fundamental function of buildings is to protect inhabitants from natural and social surroundings, and to realize a comfortable living space, in other words to provide inhabitants with safety, habitability (functionality, comfortability and beauty), and durability etc..

Let's define building characteristics necessary for those functions as "qualities". And the word "performance" in this text will be used as a unit of measurement to evaluate the function.

A building is one of the consumer durable goods. When compared with other industrial consumer durables, it could be featured as:

- (1) Individuality
- (2) Unstable factors in production
- (3) A long period of production
- (4) Difficulty of measuring performance or quality
- (5) A long period of use
- (6) High price

#### **Characteristic (1) (Individuality)**

"Individuality" derives from the principle of constructing a building which is to realize the requirements of a client to the maximum extent under certain economic and social restrictions. As a result, if you look at buildings closely, you will find that each of them has different functions and qualities. Even when compared the units in the same condominium, each of them also shows difference in those functions and qualities.

Especially in the Japanese market, the majority of existing and newly constructed house-building is a wooden detached one which is constructed by a small contractor according to the order of an individual owner. The house constructed for sale by builders is a majority in the housing market in many nations.

As a result, it is very difficult for consumers to know if they have paid a reasonable price for the product they obtained because they have no method to make a comparison, which may cause a time-consuming dispute. For the builders, planned production is impossible, which makes the quality management less easy.

#### **Characteristic (2) (Unstable factors in production: Unstableness)**

"Unstable factors in production" inevitably remain in existence as buildings are composed of manual works in variable outdoor environments using hard-to-stabilize materials (such as concrete and timber) and also on an unstable land. On the other hand, industrial products are

general produced based on the well-reviewed standard designs and on the machinery production lines controlled by quality management systems in an indoor stable environment.

**Characteristic (3)** (Long period of production)

The building construction takes a long period of time from the project planning stage to the actual stage of occupancy, and it is quite possible that the economic backgrounds or preference of the parties concerned change during this period. A risk of bankruptcy of producers and change of financial capacity of a client also could happen. Needless to say, a bankruptcy of builder before reception of a house is very serious and difficult for a consumer to deal with.

**Characteristic (4)** (Invisible quality)

Safety, habitability and durability of a building are respectively highly abstract issues. Therefore it is difficult even for a specialist to measure these performances and also to find out a “latent defect” in a real building.

Technologically speaking, the quality of a house in many cases should be considered as an output of a system consisting of human beings, environment and building itself. And nondestructive testing is impossible in many cases. And furthermore, the evaluation of quality of a house is greatly dependent on an individual scale of evaluation (preference).

In a word, many of qualities of a building are invisible or intangible. Only superficial qualities such as the appearance and external beauty are visible or tangible. This is why disputes on defects are uneasy to be settled.

Characteristic (4) implies that it takes an especially large amount of cost to confirm whether the building is provided with the quality which is expected in a contract by the client. And there is always enough room for complaints or disputes remaining.

The “invisible quality” accounts mainly for the so called “Defective Building Issue” and is a major cause of long disputes. The defect issue is unable to be easily resolved.

**Characteristic (5)** (Long period of use)

No explanation may be needed. But, it should be noted that this feature itself includes characteristics (4) (the durability is invisible), and also that the result of the transaction (defective premise) makes bad effects on inhabitants and the environment over a long period of time.

**Characteristic (6)** (High price)

“High price of building” may also need no explanation. But, it should be noted that this brings, as a result, a lack of experience in transactions on the part of nonprofessional client (consumer). A consumer is in a very vulnerable position in a real-estate market.

If a consumer repeats many transactions, he/she will be more successful, and even in the event of a failure, he/she will be able to recover damages through successive transactions.

### **3-1-2 Consumer’s Risks in House Acquisition**

As stated above, the consumer is exposed to three types of risks in acquisition of a house (buying or constructing a house):

- (a) Defect of building (risk of qualities):  
associated with the characteristics (1), (2) and (4)
- (b) Breach of contract (risk of contract):  
associated with the characteristics (3)
- (c) Failure of choice (risk of choice):  
associated with the characteristics (1) and (4)

And the characteristics (5) high price and (6) invisible qualities amplify a damage of consumers.

### **3-1-3 Economic Backgrounds (Mechanism of Market Failure)**

The next factor is an economic background of defects. In the field of the building industry a labor shortage often continues in a growth of economy. Skilled labors can hardly be trained in a short period.

It is clear from a macro economic point of view that an increase of demand over a long period of time results in sharply rising prices and also reducing qualities of buildings as well as skills of labors.

From a micro economic point of view, a transaction may be taken as a game in a market. Let us consider what the market theory says.

When the market is in a state of "perfect competition", an optimum (Pareto-Optimum) result is realized under some premises. This means the condition under which both a seller (construction contractor, developer, builder or estate agent) and a buyer (client or purchaser) can not expect more satisfaction without sacrifice from the other part. The perfect competition market is defined variously, but can be simply put as a market of which the assumption of "pure competition" and that of "perfect information" are satisfied.

For pure competition, it is assumed that the objects of transaction are homogeneous and that there are sufficiently large number of sellers and buyers respectively, with free choice of participation or withdrawal from the market.

For perfect (information) market, it is assumed that all of the participants in the transaction know perfect information on the price and qualities of the object of the transaction.

As the characteristic (1) (individuality) stated in the preceding section indicates, buildings do not fulfill the assumption of pure competition inherently. Normally, there are the participation of not a few construction contractors for one developer (project) in the construction market. In the case of a transaction of a real estate, it may be regarded as a transaction game in which a number of buyers compete to get one seller.

In either case, it is a game determined by tactics. Accordingly, the influence of power (experience, economic forces etc.) appears in the result. An owner having economic power such as a government agency or a big real estate company may generally hold a strong position to the constructors.

On the other hand, individual home owners or purchasers (consumers) are placed in a disadvantageous position against the builders, developers or real estate companies.

In reality, however, extremely biased results do not always occur. Coalitions of consumers may

be made on the one hand, and there are leading prices in market, although indefinite, and safety valves such as noneconomic restrictions from social reputation to the concerned parties on the other.

Next, buildings are highly incomplete information goods with respect to quality as the characteristics (1) (individuality), (4) (invisible qualities) and (5) (long period of use) indicate. It is sure that the assumption of the perfect (information) market is not also satisfied. The characteristic (5) (long period of use) also indicates that there is incompleteness in the price information (especially maintenance expense).

Further, from the characteristic (6) (high price), it can be easily understood that the consumers are generally placed in an overwhelmingly disadvantageous position with respect to the volume of information because of the lack of experience in transaction of a house. The purchase of a house could be an once-in-a-lifetime event for a large majority of consumers.

If the competition is made in such an imperfect market, the “adverse selection” occurs, resulting in degradation of the quality. That is, “good appearance, bad in essence” buildings are likely to govern the market. It is a matter of course that the quality of works is going to degrade, because the proper quality is difficult to confirm. This is the most important point of the defective premises issue. If the information on the market were complete, or nearly complete, there might be a very little difference produced between the expectation and the reality, but if any difference, the details of such difference could be arbitrated. The defect could be prevented before the fact and remedied after the fact. There would be no defective building (social) issue.

As remarked above, a failure in the transaction of a house building is a long lasting bad influence a in view of the characteristic (5) (long period of use) and also is not recoverable damage for a consumer because of the characteristic (6) (high price).

The building market fails if it is free. The non-market system for consumer protection is necessary even in free nations. Out of the point of the argument, the building control is also necessary for public protection for the same reason.

## **3-2 Legal Background**

### **3-2-1 Limitation of Contract**

The "principle of private autonomy" is in general applied to transactions of buildings. However, in the case of buildings, the qualities which concern the safety of occupants or third parties are subject to be controlled under the Building Code and other rules or regulations. This (building control) is to be considered a restriction to the said principle.

Consequently, the qualities of the individual buildings are determined, for the greater part, by the contract agreement or agreement of sale. In the case of the latter (sale), the scope of choice of the purchaser become narrower than in the former, but it may be taken as a determination in the principle (economically in the market).

In the contract, the “lack of qualities expected normally or on the contract” is called a “defect”. Practically there are many terms of the same meaning and different impacts mentally in a culture.

The contract is an agreement written by symbols and words. Then it is unable to define all of the physical qualities and characteristics of an objective article of the contract. A word is a symbol

but not a thing. Important points in an agreement are noted by symbols, but the other points are not nor could not be noted specifically in the contract.

The thing has infinite qualities (by articulation) but we can not infinitely use words. The ambiguous parts not-described are placed in the concept of "normally expected qualities" (implied qualities) for consideration.

For example, the quality "no rain leaks" is not always conspicuously confirmed by wording in the contract, but it is a normally expected quality, so that if the roof has a leak, there arises a issue of reparation of "defect" as a matter of course. In the case of sale of an existing building (sale of a determinate article), the situation is more or less complex and "latent defects" becomes a key concept, but the same thing can be said.

Here, it should be noted that the normally expected qualities are subject to change with social conditions, as they are determined, so to speak, socially, not technologically. Particular care should, therefore, be taken for qualities concerned with safety.

The definition of the defect above mentioned has always a definite center and indefinite surroundings. This associates with characteristics (mechanism) of a word and symbol.

Anyway, such ambiguity, if it is of a large extent, makes it difficult to resolve the issue of defect. As lawyers say, it is reasonable as a legal act to agree and write very minute points in a contract. However it requires much more cost (money and time) in practice with another ambiguity

It is vital that a consumer has generally no knowledge sufficient to understand neither words in a contract, design drawings nor specifications of a house building. Therefore the in-depth detailed agreement is not always reasonable.

Thus, ambiguous (simple or non-detailed) contracts prevail. Especially in Japan small housing projects by individual owners make up the majority of the building market. And these house owners in many cases can not understand drawings and specifications of house building they ordered.

Because of the knowledge gap, the agreement between a consumer and a producer (builder or developer) is always imperfect.

### **3-2-2 Traditional\* Responsibility of Defect in Japan**

Every nation may have its own legal system in regard to the responsibility of defects. Let me touch upon a Japanese legal system concerning a defect. In Japan the fundamental law system is stipulated in the *Civil Code* which is traced back to the Napoleon Code in France.

When a "latent defect" is found, there is a responsibility for a builder to compensate damages of a client resulting from the defect. In the *Civil Code*, the right of claim for repair and compensation of damage by a defect, even if a defect found in the ground, is recognized for the owner in the case of a construction contract (Article 638) but the right to cancel the contract (Article 635) is not recognized. Duration of the responsibility for defect is stipulated as 5 years after reception of the building, or 10 years for the hard buildings (Article 638). This article is explained as an adoptive provision. The period is extensible for duration of prescription (10 years) by a special agreement (Article 639). However there is no definition of the defect.

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\* Before the Housing Quality Assurance Law (1999)



In the case of a sales contract (sale of determinate article), the right of claim for compensation of damage (and according to theory, the right of claim for repair) by latent defects is recognized for the purchaser, or the right to cancel the contract for a defect of an extent endangering achievement of the object of the contract (Article 570). The right of claim maintains 1 year from the time of finding the defect.

Under the *Land and Building Transaction Law of Japan*, any contracts more disadvantageous to the purchaser than the provisions in the Civil Code are made null and void at present, except those specially agreed for 2 years warranty (Article 40, *ibid.*). It is technically and empirically unrealistic to specify a warranty period of 10 years for all sorts of defects or 1 year after discovery (not delivery). The period of 2 years indiscriminately seems to be realistic and well-balanced with industrial goods, but not always satisfactory for consumers in case of structural defects.

It is characteristic that two types of responsibility against defects, long term responsibility for structural defects and short term responsibility for the other defects are imposed to a producer, and that no defect is specifically defined in laws.

In Japan, Housing Quality Assurance Law 1999 (HQAL1999.) was introduced with the following purposes:

- (1) Promotion of maintaining the quality of the housing
- (2) Protection of the housing purchaser
- (3) Rapid and economical solution of dispute

HQAL establishes three schemes for those purposes:

- (1) Housing performance indication system (not compulsory)
- (2) 10-year liability for fundamental performances of new housing (compulsory) (a special law of the Civil Code)
- (3) Alternative Dispute Resolution system for housing adopting the indication system

The 10 year liability and performance indication system is introduced based on the French system.

Suppliers (builders or developers) are now liable for defects of structural and rain-proof performance of a new house building during 10 years after delivery. The other defects are conducted on the common rules.

The housing performance indication system stipulated in HQAL lays down a set of common rules and standards to evaluate performances (indicators) of housing system. The evaluated performances become objects of contracts. A purchaser can make a comparison among different types of housing by the performance indicators and avoid the risk of choice mentioned above (2-1).

### **3-2-3 Using Professionals to Prevent Defect**

To prevent defects, a supervising system by professionals is adopted in many countries. In Japan, supervising based on the *Architect Law* is provided after the Second World War. But this law system may be efficient for large building projects but not adapted to individual small house market.

The main reasons of dysfunction of this system are that it costs too much for an authorized architect or engineer to supervise the works of a small individual house-building and that supervision (or inspection) can not assure the qualities of a building. It is a good design and works that create quality of a building. Architects or building engineers can not warrant a defect by themselves.

The warranty of results is important but records of supervision are not important for a consumer. An effect against cost is not efficient.

If a builder gives assurance to provide expected results, the client choice not to ask the architect to supervise the works may be reasonable, although the results may be more or less risky.

The architect (engineer) law system is so constructed as not to meet with needs of end users (consumers).

### **3-3 Consumers' Movement**

The consumers' issue or the consumers' movement is considered to occur as a natural consequence along with the development of a production system. The issue of defects is a characteristic of the consumers' issue.

In the old days, the products were generally traditional ones so that every one had more or less knowledge and experience of their properties (qualities) and methods of production through everyday life. In addition, the production was done in a local community so that the purchaser and seller were, in most cases, familiar with each other.

Accordingly, the completeness of information in transactions was substantially maintained. In other words, both purchaser and seller had a good understanding each other. Though disputes occurred exceptionally, judgments were passed relatively easily. It seems that the prototype of civil law was formulated as criteria for such backgrounds.

However, with technological development, the social division of production took place. Separation of the producers and consumers occurred. As a result, differentials in economic power, knowledge, experience, etc. between the two sides expanded increasingly, and impeded a direct communication or a mutual understanding between them. The consumer is placed in a relatively weakened position in the market. The expression "planned production is to produce things without knowing the face of customers" straightforwardly reveals such a change of social relation.

Then, there occurred consumers' movements to recover a strong position in the market. First, in the middle of the 19<sup>th</sup> century, a livelihood co-operative association was formed in England. It spread through the European countries toward the latter part of the century. However, this means nothing but the consumer himself becoming a producer (mainly distributor). Therefore it may be inherently limited.

On the other hand, in the U.S.A. a consumer federation was organized in the end of the 19<sup>th</sup> century, as a movement to purchase commodities from good shops. This movement took root, through struggles against the issue of the safety of foods, etc., as a movement intended to offer proper information concerning the commodities. After the World War II, this movement spread to the advanced free nations. It was intended to secure freedom of choice for consumers and, at the same time, obtain good commodities at reasonable prices through the market competition.

The former is called the consumers' movement of the livelihood co-operative association type, and the latter the informational type. In Japan, similar movements are also spread.

In the field of building, however, technical knowledge and experience are required. Therefore the first type is not likely to succeed, but the second type will develop further, or otherwise another type will be generated with a specialty in buildings (dwellings). The housing warranty system is closely relative to the second type movement, though the characteristic of the system changes according to the stage of progress.

### 3-4 Countermeasures

Above mentioned (3-1-2), the consumer is exposed to three types of risks in acquisition of a house:

- (a) Defect of building (risk of quality)
- (b) Breach of contract (risk of contract)
- (c) Failure of choice (risk of choice)

In many countries the warranty scheme is mainly composed to protect a consumer from the first type of risk (quality assurance) and a few schemes have a system against the second type of risk (completion warranty).

Details of the present situations in the world will be referred in the following sections.

As concerns the third type of risk only two nations (France and Japan) adopt a system for consumer protection. This system (a quality labeling scheme or quality evaluation scheme in France and Japan) is differently categorized from the warranty scheme, so this analysis excludes it.

In the following sections the author analyzes countermeasures mainly to deal with the risk of quality and collaterally the risk of contract.

#### 3-4-1 Characteristics of Defects of Building

The cessation of vital or important functions of a system is called technologically "failure". The defect in building can be considered the failure. It is known that the failure rate function  $\lambda(t)$  of a system generally has the following characteristic (Figure 1).

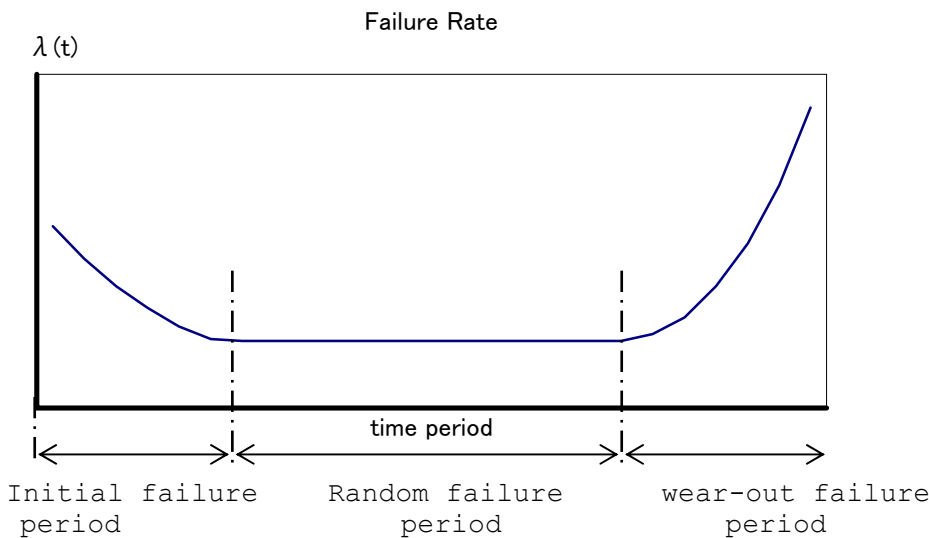


Fig. 1 Failure

Statistic data of repair after reception, although they are not always disclosed, shows that the building repair in a short time after reception has also the same characteristic of failure in the initial failure period of a System.

From the legal point of view, it is clear that the man on producer's side must supply his products to consumers without any defect. In disregard of theoretical possibility, however, to supply a perfect product with no defect is not realistic considering its cost and time. Therefore it is less expensive and more reasonable to repair defects found in the stage of use, even if the probability of defect of product can not be neglected.

The failure in the initial failure period must very probably be a result of defects of some sort, and therefore the guarantee period must cover at least the initial failure period which depends on the characteristic of parts and materials of product.

In the case of building, considering the characteristic (2) (unstablensess) mentioned at the chapter 2, it takes at least one year after completion of works, during which the building is really exposed to the all loads of environmental effects of the every 4 seasons and stabilized in quality after drying and shrinkage of materials.

The goods in building which are used everyday like equipments of kitchen can be tested during the short period of use, but defects in antiseismic function of structure, energies conservation function of building, fire safety performance of building spaces, or water tightness of exterior parts of building are difficult to be found out.

There are a couple of complex issues when defining a defect. The first is an issue caused by the undesirable but inherent nature of building materials. The concrete cracking, the timber warping resulting from drying are typical examples of this category. They are inevitable phenomena but frequent causes of disputes between producers and consumers. It is necessary for producers to explain the negative side of characteristics of materials beforehand and at least, to design to prevent substantial damages from them.

The second is an issue coming from the uncertainty of the performances of building. The evaluation of performances of a building generally depends on a complex system which is composed of the qualities (performances) of building, the effects from environment (including human activities) and the human judgments.

To simplify the issue, let's consider the case in which the human judgment has no influence. The magnitude of an effect on building caused by the environment and levels of quality of building are measurable. And these elements are random variables.

In the simplest case where the quality can be evaluated by a physical measurement and where a certain level is guaranteed by a producer, a failure (defect) is defined as falling under the guaranteed level of quality. (Figure 2)

In the general case, the failure arises when the magnitude of an effect exceeds the strength level of quality. (Figure 3)

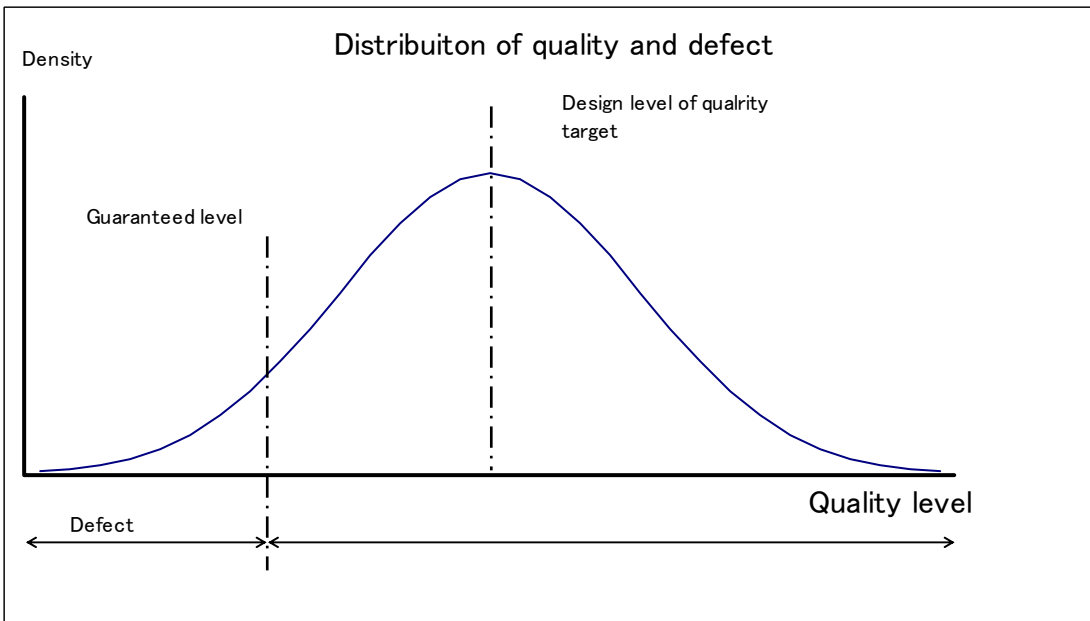


Fig. 2 Distribution of Quality and Defect

The margin of quality (quality level - effect level) is a key concept. If the margin is negative the failure arises, and if the margin is positive the failure does not arise. (Figure 4)

It is clear that there is a case where the failure occurs even if a defect does not exist and vice visa, there is a case where the failure does not occur even if a defect exists. The cause of failure is not always easy to find out.

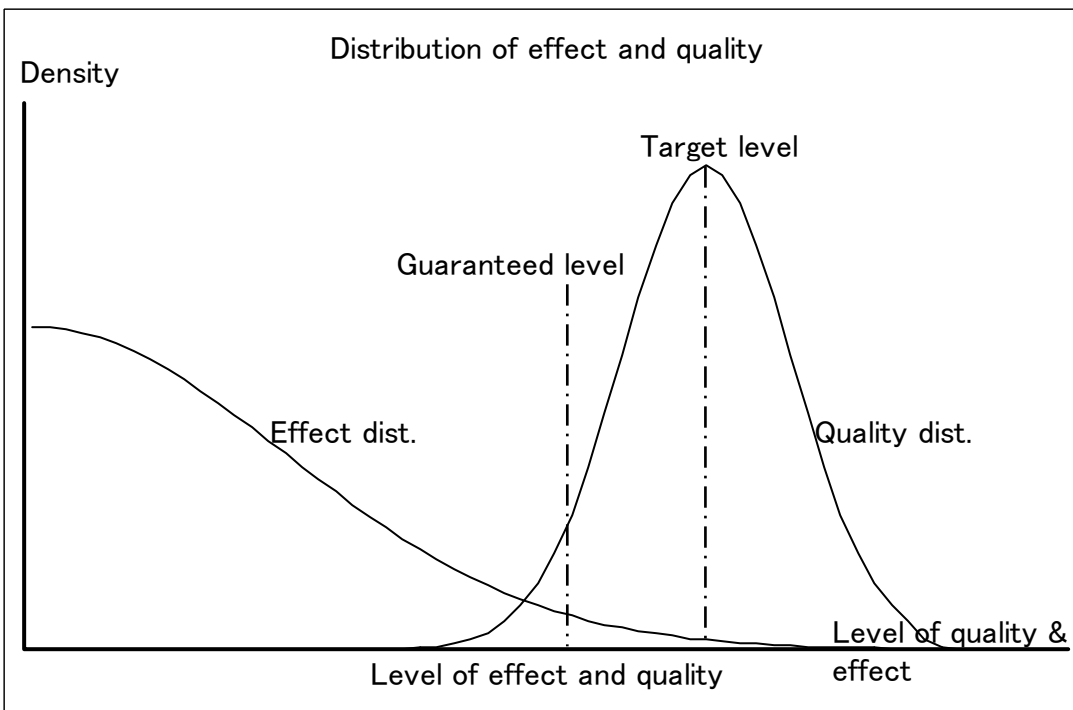


Fig. 3 Distribution of Effect and Quality

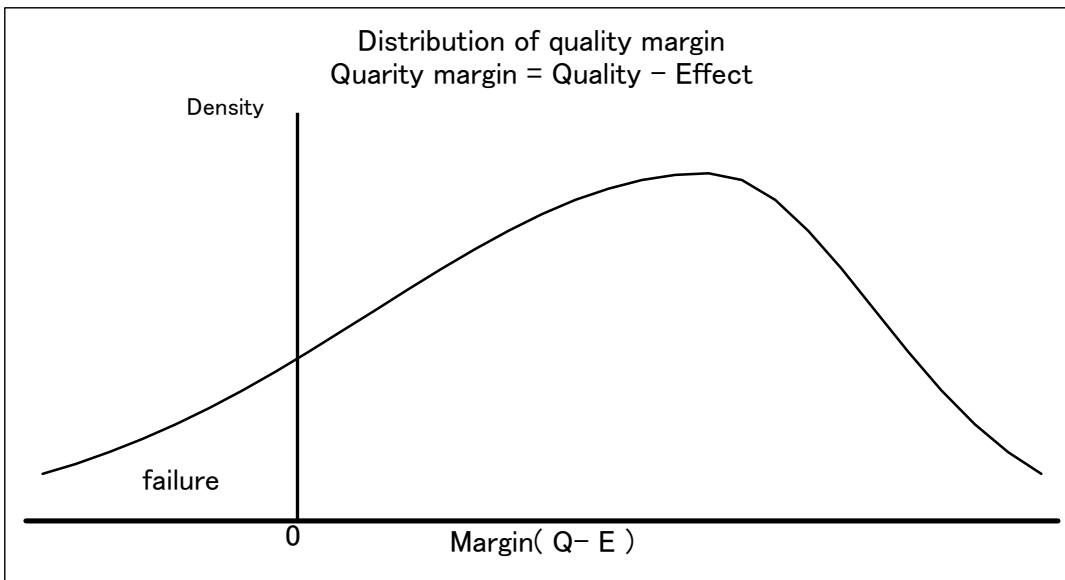


Fig. 4 Distribution of Quality Margin

In the real world, however, the magnitude of effect and the level of quality are not always measurable, and moreover the human factor has always a vital influence on evaluation of the failure. The evaluation of performance of the house as an object of a construction contract or an agreement of purchase depends, in a large portion, on individual standards of the concerned parties. The judgment of a failure or the presumption of the cause is inevitably disputable.

### 3-4-2 Definition of Defect and Term of Warranty

The “defect” is defined as a lack of qualities expected normally and on the contract. The clear and specific definition of defects might be desirable, but an ambiguity in wording is unavoidable. Symbols and words are not a thing and can not represent characteristics of all defects. The detailed definition by many words will disappoint consumers. The consumer satisfaction is an important key concept.

A wide coverage of warranty is also desirable for consumers. The more the coverage and term of warranty spreads over, the more the cost of scheme increases. The optimum point may change according to economical and social environments of the scheme.

The decision of warranty conditions, which contain a definition of defects, should be made based on the concept of “consumer satisfaction”. So it is very important to explain consumers not only without inconsistency but also in plain words for consumer’s understanding.

### 3-4-3 Dispute over Defect

A dispute over a defect often happens between a producer and a consumer, when the latter evaluates the house acquired lacking some of the qualities expected normally or prescribed in the contract, but the former does not. The producer, therefore, could keep out of the dispute, if he has quality-control to realize the expected qualities and repair defects without any delay.

This contains some truth but the actual dispute is a little more complicated. A man in dispute makes an effort to keep his position advantageous. A man would not make a dispute before he makes sure the advantage over his opposite party. The real causes of dispute in this case do not always correspond with the facts which he insists on as the causes of dispute.

The purpose of dispute is a recovery of discontent sustained in a contractual relationship. In many disputes the facts insisted on are measures to attain this purpose. If a concerned party of contract has any dissatisfaction at the results of negotiation, the detailed descriptions defining the defects to be repaired have an only effect on reducing the means of dispute.

A basic point to prevent disputes is an effort to maximize the satisfaction of customer under the economical and technical restrictions. The word is not a thing (building) and the design drawing is not the building which it stands for.

### **3-4-4 Preventive System against Defect**

The level of quality in which the consumer finds satisfaction is naturally limited by the cost of construction, but the consumer is apt to enlarge his expectations disregarding his payment. The fundamental cause of defect troubles is the difference between the expectations and the realities. It is therefore necessary to make the information perfect of the object of contract, especially to furnish full information on the house to the consumer who has no sufficient experience in house acquisition.

The plain presentation of guarantee conditions is efficient. The reasonable determination of the conditions is logically a very difficult issue, because it depends ultimately on the distributive justice (equity in distribution). But in reality it can be empirically determined on the statistical base on the current industrial standards.

The guarantee against every failure seems to reduce the loss of consumer and so appears a good measure of consumer protection, but the increasing cost of guarantee may be partially loaded on top of the price of house through the market mechanism. Therefore, the overall guarantee without any restriction is not always reasonable for the consumer itself, the guarantee under certain limited conditions is more effective.

The cost of repair or prevention of defects should be borne by “the cheapest avoider” of failure.

The quality control system under the supply side responsibility is technologically indispensable and efficient to prevent defects of building. It realizes steadily the quality expectations through the well-reviewed plans and the reliable executions of work. Measure such as the inspections by the third party or an employed engineer and the registration of builders would have some benefit, but the effect is limited from this point. They are rather indispensable from the moral hazard perspective in the insurance system mentioned later.

Even if the quality control system is well established and operated, the failure can not be completely prevented. The repair system without delay is necessary in order to stop the propagation of physical damages and customer’s dissatisfaction. On the other hand, it is not always easy for the producer to bear the risk of repair. Because the responsibility for building generally rests during a long period and so there is a risk, although it is a very little, that the cost of repair runs into huge figures.

The insurance system is, therefore, very effective to secure the of repair cost without delay and to stabilize the management condition of the producer.

Even after all measures, there is still a fair possibility of the dispute over defect, because the discrepancy of interruption of an agreement is based on the conflict of interests between the consumer and the producer. Therefore a system for conciliation, mediation or arbitration is necessary and effective to settle disputes, although the final settlement is a judicial proceeding.

Judicial process is often lacking the expert knowledge of building and takes a long time, much expense and heavy mental stress with respect to an expected result.

### **3-4-5 Breach of Contract (bankruptcy of builder, etc.)**

When a client made an advance payment to a builder and the builder failed to complete a project, the client suffers from a heavy damage and it is almost impossible for a client consumer to deal with the event. So as a matter of course the consumer needs safety net upon acquisition of a house building. However a fail of business enterprise is not a stochastic phenomenon. It is a result of decisions of business administrators and change of economic and social environments. So it is very difficult to control (inhibit and stabilize) the risk of bankruptcy.

In order to control the risk a registration system of builders or developers is generally adopted. To be registered they are examined on their financial and technical ability or a surety bond by a bank is required.

The registration system or bond rating agency is necessary but not perfect to control a risk of breach of contract. However on the registration system we can compose a “completion warranty system”, which protects consumers from the risk of contract in certain extent.

### **3-5 Structure of Home Warranty Scheme**

First of all it is necessary to set a target of the scheme, more specifically, the warranty conditions for consumer protection. Mentioned above, the more the coverage and term of warranty spread over, the more the cost of scheme increases. The final target is to realize “consumer satisfaction”. The optimum solution may be different in economical and social environments of the scheme.

According to the previous analysis, the composition of the warranty scheme should be as follows:

- (1) Warranty system, the aim is to describe the warranty conditions (responsible person, duration and coverage) in plain words.
- (2) Quality management system (which contains a quality control system to prevent defects technologically) which leads to “consumer satisfaction”.
- (3) Registration system of producers (builder and developer), the aim is to prevent possible defects of building and bankruptcy of producer.
- (4) Insurance system, the aim is to pool the risks; not only a risk of quality but also a risk of contract.
- (5) Dispute resolution system, it is impossible to resolve all the risks in regard to quality, contract, as well as dispute over them. So, “Alternative Dispute Resolution”(ADR) system is effective in many cases, though the final resolution depends on the judicial system. In practice there may be many different system arrangements. One organization can integrate those 5 subsystems, but every 5 systems could independently exist and function in a coordinated manner on contracts.
- (6) Efficiency of scheme

For consumers, the cost is always the major concern. The risk of house acquisition is important economical matter in almost all cases. So the economical efficient scheme is an essentially important point for analyzing the system.

The total cost of a warranty scheme is mainly composed of a cost for defects prevention, cost of remedy and procedures. The total cost per house must be lower than the risk premium for



consumers who purchase the house.

As I mentioned above, the consumer satisfaction is an ultimate goal of the scheme. We can evaluate the effectiveness of the home warranty program by surveying consumer's satisfaction level.

So the effectiveness of scheme is a very essential to analyze the warrant program.

### **3-6 Working Hypothesis of Survey**

We designed a survey on warranty schemes around the world based on the structure (5 subsystems and 1 point of consumer's view) mentioned above as a working hypothesis.

We have tried to collect uniform information though the result of survey does not always correspond with our intention. This also would explain the difficulty of setting an impeccable scheme of consumer protection based on the actual situation in each country.

However, it is beneficial for us to understand the various schemes in different countries, using the structure developed in this chapter.

## 4. New Home Warranty Schemes in the World (Country by country reports)

### 4-1. Australia

#### 4-1-1. Background

In Australia, consumer awareness of their rights has increased substantially over the years. Notwithstanding this, and considerable consumer protection legislation, it is still common for consumers to enter into building contracts on the shake of the hand.

To address these issues, State Governments have introduced a variety of laws that put the onus on builders to be fair, by regulating Home Building Contracts, providing for “Home Indemnity Insurance” schemes, and the licensing of builders.

Australia comprises 8 States and Territories, each being autonomous and obviously, as in any democracy, their approaches to these matters are different. For ease of this paper, matrixes are used to explain the variations.

#### 4-1-2. Licensing or Registration of Builders

STATE/TERRITORY	STATE LICENSING	HOME INDEMNITY INSURER
AUSTRALIAN CAPITAL TERRITORY (ACT) Capital City – Canberra	Yes   1924	Private 1988
NEW SOUTH WALES (NSW) Capital City – Sydney	Yes 1971	Government 1973-96 Private 1997
NORTHERN TERRITORY (NT) Capital City – Darwin	No	Under Consideration
QUEENSLAND (QLD) Capital City – Brisbane	Yes 1971	Government 1979
SOUTH AUSTRALIA (SA) Capital City – Adelaide	Yes 1968	Private 1986
WESTERN AUSTRALIA (WA) Capital City – Perth	Yes 1939	Private 1997
VICTORIA (VIC) Capital City – Melbourne	Yes 1995	Government 1974-95 Private 1995
TASMANIA (TAS) Capital City – Hobart	Yes 2004	Private 1993

Most States/Territories are modifying these systems continually and the information provided is therefore in general terms.

### 4-1-3. Building Disputes

In addition to licensing builders, Queensland, New South Wales, Victoria and Western Australia have introduced what are referred to generically as 'Building Disputes Tribunals'.

These are quasi judicial Tribunals with varying powers but with an emphasis on being a low cost, non legalistic, speedy forum to determine workmanship and some contractual disputes that arise in home building.

Orders that emanate are legally binding on the parties and failure by the builder to comply can result in cancellation or suspension of their license and/or a fine or prosecution in the Local Court. In certain circumstances the owners can also be prosecuted .

“Refer to Summary Matrix – Builder Regulation”. (Attached)

### 4-1-4. Home Indemnity Insurance (H.I.I.)

Originally, H.I.I. applied to all residential buildings undertaken throughout Australia. In recent times, Insurance providers have lobbied State Governments to get exemption for, in general terms, multi unit developments exceeding 3 storeys.

The traditional cover that the home owner can expect from H.I.I. is for an agreed amount to complete the house or remedy defects in the event that their builder dies, disappears or becomes insolvent and cannot complete these statutory obligations.

### 4-1-5. Building Audits

Insurers and licensing authorities have, in recent times, taken far more interest in builders' performance and will not insure or license them unless the builder has provided adequate trading and financial figures and a reasonable business plan.

Premiums are set accordingly.


Notwithstanding this, builders consider that the limitations set by some insurers are too restrictive to allow for the flexible market that prevails.

### 4-1-6. Cost of H.I.I.

Costs vary widely due to turnover, previous history/claims, location, construction methods etc. The likely cost for insuring an AU\$200,000 home through the H.I.I. legislation would be in the region of AU\$500 to AU\$1500.

Attached is a matrix of each States H.I.I. provisions.


## INSURANCE COVER MATRIX

	QLD	NSW	VIC	ACT	SA	TAS	WA	NT	NZ
<b>Scope of Insured Work</b>	Residential Construction Work up to 3 storeys, outbuildings, extensions, renovations	Residential building only. Multi unit development exceeding 3 storey are exempt.	Residential building only. Multi unit development exceeding 3 storey are exempt.	Residential Construction Work up to 3 residential storeys plus garages, extensions and renovations	Work subject to a domestic building work contract	Domestic Buildings, extensions and renovations, excludes detached garages / outbuildings	Residential building only. Multi unit development exceeding 3 storey are exempt.		
<b>Minimum Insured Value</b>	\$3 300	\$12 000	\$12 000	\$12 000	\$12 000	\$12 000	\$12 000		
<b>Period of Cover</b>	6 years 6 months from contract	6 years from completion	6 years 6 months from completion	5 years from certificate of occupancy	5 years from completion	6 years from date of completion	6 years from practical completion		
<b>Sum Insured</b>	Replacement value but not exceeding \$200 000	\$200 000	MT \$200 000	Value of the contract work to maximum \$85 000	Value but not exceeding \$80 000	Value of contract work to maximum \$200 000	\$100 000		
<b>Excess</b>	Nil	\$500 maximum	Nil - Non completion Defects: 12 months - 3 years \$500 maximum 3 - 5 years \$750 maximum 5 years + \$1 000	\$500	\$400	\$500	\$500		
<b>Deposits</b>	Unrestricted cover, legislation prescribes recommended deposit	10% of contract value < \$20 000; 5% of contract > \$20 000	10% of contract value < \$20 000; 5% of contract > \$20 000	Maximum \$10 000	Any extra cost to complete	Limited to 3% of the contract for building \$20,000 and over. 10% for contracts under \$20,000	6.5% of the contract - maximum \$13 000		

## INSURANCE COVER MATRIX

	QLD	NSW	VIC	ACT	SA	TAS	WA	NT	NZ
<b>Source of Compensation</b>	Death disappearance, insolvency, termination	Insolvency, death or disappearance	Insolvency, death or disappearance	Insolvency, death or disappearance	Insolvency, death or disappearance	Insolvency, death or disappearance	Insolvency, death or disappearance		
<b>Time Limit for claims</b>	2 years from contract - Qld to check	12 months from failure	180 days from event	90 days from event	90 days from event	Within 3 months of event	Nil		
<b>Defects</b>	Category 1 - structural Category 2 - standard of finish	Breach of Warranty - Insolvency, death or disappearance	Breach of Warranty - Insolvency, death or disappearance	Breach of Warranty - Insolvency, death or disappearance	Breach of Warranty - Insolvency, death or disappearance	Breach of Warranty - Insolvency, death or disappearance	Breach of Warranty - Insolvency, death or disappearance		
<b>Subsidence</b>	No fault subsidence regardless of cause	As a result of defective work	As a result of defective work	As a result of defective work	Where the work is defective and the contractor is insolvent, dead or has disappeared	As a result of defective work	Where the work is defective and the contractor is insolvent, dead or has disappeared		
<b>Uninsured Consumers</b>	Consumers are deemed to be insured where contract entered into licensed house builder or in the case of fraudulent misrepresentation	No cover	No cover	No cover	No cover	No cover	No cover		

## INSURANCE COVER MATRIX

	QLD	NSW	VIC	ACT	SA	TAS	WA	NT	NZ
<b>Owner Builders</b>	No provision	7 year cover from the completion for defects <u>not</u> identified at sale inspection. For subsequent owner, must buy insurance.	6 years from the completion or within 7 years after the date of commencement of work (if not C/O or CFI) for defects <u>not</u> identified at sale inspection	No provision	No provision	6 years from the completion or within 7 years after the date of commencement of work (if not C/O or CFI) for defects not identified at sale inspection	Cover to be provided if sold within 7 years of issue of building license		
<b>Types of Policies Permitted</b>	Job specific	Job specific, annual, professional indemnity	Job specific and annual	Job specific	Job specific	Job specific	Job specific		

# BUILDER REGULATION MATRIX


	QLD	NSW	VIC	ACT	SA	TAS	WA	NT	NZ
<b>Licensing Regulatory Approach</b>									
Government Regulation	Y	Y	Y	Y	Y	Y	Y	MT	
Co-regulation	N	N	N	N	N	Y	N		
Self-regulation	N	N	N	N	N		N		
<b>Licensing / Accreditation</b>									
Regulation	Y	Y	Y	Y	Y	Y	Y	Y	
Residential Builders	Y	Y	Y	Y	Y	Y	Y	MT	
Commercial Builder	Y	N	Y	Y	Y	Y	Y	?	
Trade Contractor	Y	Y	Y	N	Y	N	N	N	
Supervisor	Y	Y	N	N	Y	N	Y	N	
Plumbers Gasfitters	Y	Y	Y	Y	Y	Y	Y	Y	
Electricians	Y	Y	Y	Y	Y	Y	Y	Y	
Public Building Certifiers	Y	Y	Y	N	N	Y	Y	N	
Private Building Certifiers	Y	Y	Y	Y	N	Y	MT	Y	
Design / Drafts Persons	Y	N	Y	N	N	Y	N	N	
Engineer	Y	N	Y	N	N	Y	N	Y	
Company	Y	Y	Y	Y	Y	N	Y	?	
Individual	Y	Y	Y	Y	Y	N	Y	N	
Partnership	N	Y	Y	Y	Y	N	Y	?	
Public Register	Y	Y	Y	Y	Y	Y	Y	?	
<b>Licensing / Accreditation Assessment Criteria</b>									
Licensing	Y	Y	Y	Y	Y	Y	Y	Y	MT
Competency Based Assessment	Y	Y	Y	N	Y	Y	Y	Y	
Categories / Classes of Licence Aligned with BCA	Y	N	N	Y	N	Y	N	N	
Technical	Y	Y	Y	Y	Y	Y	Y	Y	
Managerial	Y	MT	Y	N	Y	N	Y	N	

Y = Yes

N = No

MT = Moving Towards


## BUILDER REGULATION MATRIX

	QLD	NSW	VIC	ACT	SA	TAS	WA	NT	NZ
Financial	Y	Y	N	N	Y	N	Y	N	
Fitness and Propriety	N	Y	Y	N	Y	N	Y	N	
Access to licensee's public dispute history	Y	Y	N	N	N	N	N	N	
Non Bankrupt Criteria	Y	Y	Y	N	Y	N	Y	N	
<b>Compliance Program</b>									
Technical Audits	Y	Y	Y	Y	N	Y	Y	Y	
Financial Audits / Investigations	Y	MT	N	N	Y	N	Y	N	
Fitness and Propriety Investigations	Y	Y	Y	Y	Y	Y	Y	Y	
Unlicensed Contracting Audits / Investigations	Y	Y	Y	Y	Y	Y	N	Y	
<b>Disciplinary Program</b>									
Unlicensed Contracting	Y	Y	Y	Y	Y	Y	Y	Y	
Failing to Rectify	Y	Y	Y	Y	Y	Y	Y	Y	
Breach of FTA	Y	Y	Y	Y	Y	Y	Y	Y	
Negligence / Incompetence	Y	Y	Y	Y	Y	Y	Y	Y	
<b>Dispute Resolutions</b>									
Alternative Dispute Resolution	Y	Y	N	Y	Y	Y	MT	N	
Formalised Industry-Based Scheme	N	N	N	N	N	Y	N	N	
Courts	Y	Y	Y	Y	Y	Y	Y	Y	
Tribunals	Y	Y	Y	N	N	Y	Y	N	

Y=Yes, N=No, MT=Moving Towards



## BUILDER REGULATION MATRIX

	QLD	NSW	VIC	ACT	SA	TAS	WA	NT	NZ
Industry Experts (outside of tridunal system)	N	N	N	N	N	N	N	N	
Limited Legal Representation for Small Value Disputes	Y	Y	N	Y	N	Y	Y	N	
<b>Standard Minimum Contract Requirements</b>									
Regulation of Minimum Contract Requirements for Residential Building Sector	Y	Y	Y	MT	Y	N	Y	MT	
Plain Language	Y	Y	Y	MT	N	N	MT	MT	
Statutory Warranty							Y		
Exclude compulsory Arbitration Clauses							N		
Rights under Regulatory Framework cannot be Varied					Y		Y		
Arbitration Clauses	N	N	N	MT	N	N	Y	N	
<b>Insurance</b>									
Mandatory Reporting Requirements for Indemnity Insurance Providers	Y	Y	Y	Y	N	N	N	MT	
Minimum for Statuary Warranty	Y	Y	Y	Y	Y		Y		
Builder Default other than Death, Disappearance or Insolvency	Y	N	N	N	N	N	N	N	
Of Building as opposed to individual trades	Y						Y		
Competative Market or Competative Neutral Market							Y		

Y=Yes, N=No, MT=Moving Towards

## 4-2. Canada

### 4-2-0. Home Warranty in Canada

Three Canadian provinces have legislated (mandatory) home builder licensing and home warranty requirements, Ontario (1976), Quebec (1999) and British Columbia (1998). The remaining provinces have voluntary warranty systems available through Home Warranty Programs.

Only BC has a legislated requirement for home builders to be licensed through a Provincial Crown Agency (the Homeowner Protection Office), Ontario and Quebec are not for profits. BC is also the only province that requires that home warranty insurance\* be provided by private-sector, provincial-regulated insurance companies, all other provinces' warranties are based on a pooled fund approach with no insurance regulations.

Six New Home Warranty Programs operate in Canada (Atlantic, Quebec APCHQ, Ontario, Manitoba, Saskatchewan, and Alberta New Home Warranty Programs). These six are essentially creatures of their individual provincial chapter of the Canadian Home Builders' Association (CHBA). Most were established as a marketing tool in the mid-70s and are still under the influence of their provincial CHBA. There is an association of the CHBA New Home Warranty Programs called the National Home Warranty Council. It has no authority over the individual Programs, though they meet 3 or 4 times a year to exchange information on topics of mutual interest or concerns.

## **4-2-1. Alberta**

### **4-2-1-1. History**

Start of the Program: 1974

### **4-2-1-2. Origins of the Program**

The Alberta New Home Warranty Program (ANHWP) was established in 1974 by the Alberta Council of the Housing and Urban Development Association of Canada (HUDAC), a national industry association.

The mid seventies were a period which saw a huge rise in the number of homes being built in Canada, thanks largely to greater numbers of young baby boomers moving into the home buying market. (At the time, 270,000 to 280,000 new homes were annually being built in Canada, compared to 150,000 to 160,000 today.)

The Canadian Mortgage and Housing Corporation (CMHC) started raising concerns in regard to the quality of the homes that were being built, as it found that some industry players were having trouble keeping up with the demand. (In addition, it was finding some instances of fraud, in the form of companies absconding with consumers' deposits.)

CMHC therefore signaled to the industry, particularly during a 1974 builders' conference, that solutions were necessary, and presented strong indications that a national, legislated solution might be found.

A group of members of the Alberta Council of HUDAC took these signals quite seriously and, opposed to the notion of a mandatory national solution, set about establishing a warranty program that would suit the industry's and consumers' needs as expressed by CMHC, but on a provincial and voluntary basis.

The details of the initiative, originally called the Alberta New Home Certification Program, were worked out in close collaboration with the consumer affairs department of the Alberta provincial government, and were modeled in part on a well-established non-governmental home warranty program in the United Kingdom.

The Alberta New Home Warranty Program is not a government entity, though a (currently unfilled) seat is available on the Board of Directors for a government representative. Nor does the program enjoy a monopoly, as builders are not required to be members and other programs may compete against it. According to ANHWP President Dennis Little, some 80-85% of the new homes built in Alberta in 1995 (22,000 out of a total of about 27,000 yearly) are sold with a warranty from the organization.

This is in contrast to other programs, such as Ontario's New Home Warranty Program, which (though it is not a government body) has been delegated, the authority to administer the Ontario New Home Warranty Act. Builders attempting to construct houses in Ontario who are not program participants are subject to prosecution and fines of up to \$100,000.

### **4-2-1-3. Participation in the System**

Voluntary

### **4-2-1-4. Major Warranty Provider**

Alberta New Home Warranty Program (ANHWP)

## **4-2-1-5. Structure of the Organization**

ANHWP is a non-profit corporation with offices in Calgary and Edmonton. Its twenty-member Board of Directors consists principally of representatives of the home builders industry. The current Board also has two financial services representatives, a corporate counsel, and a consumer interests representative (who is chosen by the Consumers Association of Canada, at the ANHWP's request.) A veteran consumer representative, CAC Alberta chapter president Larry Phillips, feels that despite there being only a single seat reserved for the consumer interest, those interests nevertheless are attended to by the Board as a whole. Mr. Phillips notes that this is because in order to continue to avoid the prospect of government regulation (which is always a concern), the Board has to ensure that the program is seen to work for consumers. He notes that the ANHWP pays the consumer representative a per diem, and provides a caucus fee to the CAC's Alberta chapter for its services to the Board. The Board sets policy for the ANHWP, including the content of warranties; typically, its decisions are based upon the advice of ANHWP staff, headed by the President, Dennis Little. All Board members are able to vote on decisions made.

ANHWP runs two offices, in Edmonton and Calgary (the site of its headquarters). Management and staff in both offices total 40 employees.

## **4-2-1-6. Protections Offered to Consumers**

The original two-pronged concept of the ANHWP has not changed since its inception. It is based upon certification of builders to prevent complaints from occurring, and a warranty to deal with problems when they arise.

### **Certification**

The certification aspect of the program consists in ensuring that each "Registered Builder Member" is indeed competent in the trade, and financially solvent. The builders execute a detailed "Agreement with Builder" which establishes the contractual relationship, which is further enhanced by the builders providing personal guarantees, letters of credit and other security instruments to cover the amounts described below.

### **The warranty**

A consumer who puts a deposit on a house being built by a "Registered Builder Member" receives a set of five warranty protections that arise on the default of the builder in accordance with the Agreement with Builder.

#### **1. Deposit protection**

If the builder defaults, the consumer's deposit is insured for up to 15% of the purchase price to a maximum of \$60,000.

#### **2. Builder Performance protection**

Coverage for up to \$30,000 towards the completion costs of discharge of builders' liens on the default of the builder to complete the home as contracted. The Program will organize and administer the completion of the home including up to \$3000 in additional legal expense for the homeowner to have access to independent advice.

### **3. Materials and Workmanship protection**

Coverage of up to \$60,000 to repair defects in materials and workmanship, during the first year of occupancy only. The \$60,000 also applies to the next part of the warranty.

### **4. Structural integrity protection**

The unused portion of the \$60,000 in materials and workmanship protection coverage is applied to cover five years of protection from structural defects affecting load bearing components of the house.

### **5. Additional Living expenses protection**

Up to \$60,000 coverage to provide pre-approved temporary accommodation if it is necessary for the occupants to live elsewhere while work is being performed in accordance with warranty coverage.

## **4-2-1-7. Construction Standard**

Alberta Building Code

## **4-2-1-8. Public Awareness /Education**

Aside from the certification and warranty aspects of ANHWP's work, a third element is public education, for both builders and homeowners. Education for builders is carried out through the Professional Home Builders Institute of Alberta, a not-for-profit corporation that is wholly owned by ANHWP. The PHBIA courses on technical aspects of home building focus on the business management and administrative aspects of homebuilding and offer several certification programs, including Certified Master Builder.

Consumer education is provided principally via publications that are offered to purchaser of a warranty-protected house and through public seminars which are based upon the information provided in the home buying publications , "from purchase to possession and beyond" and "The Way Home" (A Condominium Buying Guide Book).

## **4-2-1-9. Share**

Builders Registered	710	
Total Homes Enrolled	360,000	
Homes under Warranty Protection		115,000

## **4-2-1-10. Costs**

**Builder Registration** \$1,000  
**Home Enrollment Fees**  
\$90 to \$885 based on Purchase Price and Builder Rating

The program enrollment fee is paid by the builder to the Program (it being understood that costs to builders are passed on to the consumer). The average enrollment fee in 2005 was \$316.

Fees are based on the price of the house and the Builder Accreditation (risk factor), and went up in 2005 to typically about \$316, which contrasts with jurisdictions with mandatory warranty

programs where the fee is often three times that amount. Enrollment fees are low, according to Adrian deJonge, Vice President of ANHWP, as a result of the Program getting other types of security from the builders, such as personal security. The Program evaluates members' customer service and financial standing, and will terminate a builder for violations. Where the Program is not satisfied by the trend of a builder's track record, ANHWP will raise premiums and become more rigorous in all its requirements.

Builder Members in addition pay an annual membership /or renewal fee. The Program maintains an investment portfolio of approximately \$27,000,000 to offset its warranty reserve liability, which is actuarially modeled by its consultant (KPMG). The investment portfolio has been funded by accumulated enrollment fee revenue.

The investment portfolio is invested in accordance with the Board approved investment policy which favors a fixed income security strategy to provide preservation of principle.

The warranty reserve liability is reviewed bi- annually and to assure Board Approved Confidence levels are maintained.

## **4-2-1-11. Dispute Resolution**

### **Mediation**

### **Conciliation**

### **Arbitration**

In case of dispute between buyers and builders, the Program offers three levels of dispute resolution. The process may start with a "request for assistance," either from the builder or from the consumer. No fee for facilitating a mediation is currently charged as the Program believes this is the most timely and cost effective dispute service. The three levels of dispute resolution are mediation, conciliation, and arbitration.

Mediation is described as an informal process where the builder and buyer agree to meet with a mediator approved by the two parties. "The facilitators assist both parties to find a mutually acceptable solution to the issues.

Conciliation is described as a more formal process, in which an inspector appointed by the Program conducts an investigation and issues a report to the builder and the buyer. A fee of \$100 is paid by both parties. If the builder fails to complete the work called for in the report in the time allotted, then the Program does the work, in accordance with the coverage provided in the warranty. It should be noted that this process does not, strictly speaking, describe what one generally considers to be conciliation (a term one usually associates with an agreement that is consensual for both parties). The conciliation decision is described as binding, though it may be appealed to arbitration. Conciliation involves no fees beyond the original fee for a request for assistance.

Under Arbitration, "an arbitrator is chosen with the mutual consent of the buyer and builder to conduct a formal hearing and issues a binding decision that includes the allocation of costs to be borne by the parties. "Arbitrators are outside professionals, and the costs involved in procuring their services can be significant. The application fee is \$200, and it may cost an additional \$600 to arrange the arbitration. Mr. Little points out that the ANHWP is anxious to ensure that, both parties think it is worth the effort to continue with an arbitration and the process is fair. The costs, by establishing a proper arbitration, contribute to ensuring fairness and, furthermore discourage parties from proceeding purely on a particular point of principle. He said that in the past ANHWP employed less expensive forms of dispute resolution, but that there are inevitably those

who will take advantage of a free process, using it to the greatest extent possible, even when their case is weak. Although it is the disputant who pays the fees, and they are not refunded by the program, arbitrators may make decisions in regard to costs, meaning the fees may ultimately be borne by the loser.

#### **4-2-1-12. Publication of Results**

Current figures indicate that less than 3% of enrollments (22,000 in 2004) result in a request for assistance. Of this 4%, approximately 1/8th (5% of all enrollees, in Mr. Little's terms), are satisfied at the mediation stage, and 3/4 at the conciliation stage, while 1/8 move on to an arbitration. Although ANHWP's annual report lays out these figures in regard to complaints and dispute resolution, the outcome of specific processes is kept confidential.

#### **4-2-1-13. Relationship with the Legal System**

##### **Panel Administration Rules**

As we have noted, membership in ANHWP is not required by provincial law. However, the program, particularly its dispute resolution services, does not operate in a legal vacuum. Arbitrations in Alberta are governed by the Arbitration Act, which provides for only minimal intervention by the traditional court system process. The Program has established a "Set of Rules of Arbitration" specific to residential construction and warranty type issues.

It is notable that when purchasing a house from a Builder Member, a buyer is obliged to utilize the ANHWP dispute resolution system first, before any other remedy. The warranty mentions that there may be a fee to initiate this service. Due to the large amounts of money at stake in the construction and sale of houses, it is not surprising that disputes occasionally do end up before the courts, despite the fact that the Program is designed to provide a system and process of alternative solutions. Such cases may involve an attempt to appeal an arbitrator's ruling. Interestingly, the Program's inspection services can sometimes serve an evidential function; judges generally accept the findings of an inspector as a basis for their decisions.

##### **Knowledge Base Approach**

The Program believes that a "knowledgeable home buyer is the best home buyer". As a consequence, a transparent and open approach to sharing information and knowledge is fundamental to the Program's approach. The internet is a valuable tool to provide a knowledge base for consumers. The following are excerpts from the homebuyers' section of the Program's websites.

- [www.anhwp.com](http://www.anhwp.com)
- [www.intheknowcondo.com](http://www.intheknowcondo.com)
- [www.moisturesmart.com](http://www.moisturesmart.com)

## **4-2-2. Atlantic**

### **4-2-2-1. History**

Start of the Program: 1976

### **4-2-2-2. Participation in the System**

Voluntary

### **4-2-2-3. Construction Standard**

- National Building Code
- AHWP Standards

### **4-2-2-4. Major Warranty Provider**

Atlantic Home Warranty Program (AHWP)

### **4-2-2-5. Overview of Atlantic Home Warranty Program (AHWP)**

AHWP was established in July 1976 by the Atlantic chapters of the Canadian Home Builders' Association (CHBA).

It is one of six new home warranty programs throughout Canada and was originally known as the "New Home Certification Program of the Atlantic Provinces".

It is the leader and innovator in the provision of investment protection to homeowners and quality services to all stakeholders in Atlantic Canada.

It fosters professionalism in the residential construction industry.

It is a private, not-for-profit organization comprised of hundreds of builder members and led by a Board of Directors comprised of Atlantic Canadian people.

Headquartered in Halifax, Nova Scotia, the Program has Warranty Service Representatives in each of the four Atlantic Provinces.

It was formed as a solution to satisfy a growing demand for new home buyer protection.

Its purpose is to provide consumers confidence in builders and to protect the investment made by owners in their new home.

AHWP's warranty provides homeowners with peace of mind that their home investment is protected for 7 or 10 years.

Homeowners can choose from two home warranty programs: Platinum 7 or Ultimate Plus.



○ **Warranty programs**

• **Platinum 7**

- 1) Deposit Protection, up to a max of \$10,000.
- 2) A guarantee that the builder will repair any defects in workmanship or materials during the first year of ownership.
- 3) Protection against major structural defects during the remainder of the warranty period to a max of \$30,000.
- 4) A conciliation service to handle any disagreements between a consumer and their builder during the first year.

• **Ultimate Plus**

- 1) Additional 12 months of protection against exterior water penetration through the foundation walls.
- 2) Additional 12 months of protection against defects in workmanship or material in the delivery and distribution of the electrical, plumbing and heating systems.
- 3) Additional 3 years of major structural coverage (from 7 to 10 years).
- 4) Additional major structural coverage limit of \$20,000(from \$30,000 to \$50,000).
- 5) Off-site living allowance if major structural repairs cause consumers to move out of their home (up to \$1,500).

○ **Fees**

<b>Builder Registration</b>	\$600 (Builder renewal \$200)
<b>Home Enrollment</b>	\$310.00

○ **Quality Control**

All members receive professional training sponsored by the Program, such as courses offered by the Atlantic Home Builders' Training Board in an effort to encourage quality construction that prevents problem.

○ **Dispute**

There is a conciliation service to handle any disagreements between consumers and builders during the first year.

○ **Share**

Builders Registered 840  
Home Enrolled Since Inception over 95,000

## **4-2-3. British Columbia**

### **4-2-3-1. History**

In January 1999 the Province of British Columbia, Canada introduced a system of residential builder licensing and mandatory, third-party home warranty insurance as a result of a need for protections for buyers of new home. The Homeowner Protection Office, a Crown corporation of the provincial government, was set up to administer these requirements in May 1999.

In the late 90's British Columbia became aware of the worst housing failure to ever strike Canada. The so called leaky condominium disaster will probably cost homeowners in BC close to \$1.5 billion (CDN) to remedy.

In March 1999 the New Home Warranty of British Columbia, a voluntary warranty company that had been in business since 1976 and owned by the Canadian Home Builders Association of BC collapsed because the value of claims from leaky condominiums exceeded its reserves.

This event shocked warranty providers around the world, and reinforced the need for consumer protection legislation.

As of July 1999, all homes in B.C. must be constructed by Licensed Residential Builders and must be covered by a mandatory, third-party home warranty insurance plan. Owner-built homes may be exempt from these requirements. After September 30, 2000 similar regulations were implemented requiring repair contractors who perform building envelope renovations to be licensed by the Homeowner Protection Office and arrange for repair warranty insurance on leaky condo repairs.

Before July 1, 1999 (prior to the implementation of the *Homeowner Protection Act*) voluntary warranty coverage usually included one year on labour and materials, and 5 years on structure. Water ingress was only covered for the first year. Only if major structural defects occurred due to a leak was water ingress covered beyond the first year. Because the former warranty system was voluntary prior to July 1999, there were some houses that did not have any warranty coverage at all.

The *Homeowner Protection Act* also established the Reconstruction Loan Program that is also managed by the Homeowner Protection Office. It provides no-interest repair loans to owners of leaky homes/condos where the building envelope has deteriorated prematurely.

### **4-2-3-2. Homeowner Protection Office**

The HPO is a Provincial Crown Corporation established under the *Homeowner Protection Act*. The HPO has a mandate to strengthen consumer protection for new home buyers, perform research and education to improve the quality of residential construction in the province, and provide financial assistance to leaky condo owners.

### **4-2-3-3. Relevant Law**

The *Homeowner Protection Act* and Regulations

### **4-2-3-4. Participation in the System**

Mandatory for Residential Builders

As of July 1, 1999, residential builders are required to be licensed by the HPO and arrange for third-party home warranty insurance from a warranty provider authorized by the provincial Financial Institutions Commission (FICOM). Without a license and warranty insurance a builder cannot obtain a building permit for new home construction or commence construction (in geographic areas where building permits are not required for new home construction).

#### **4-2-3-5. Major Warranty Providers**

As of March 2005 there are four companies offering home warranty insurance in British Columbia.

1. Commonwealth Insurance (represented by Willis Canada)
2. Lombard General Insurance Company of Canada
3. Royal & Sun Alliance (represented by National Home Warranty Programs and Marathon Warranty Company)
4. St. Paul Guarantee Insurance Company

#### **4-2-3-6. Licensing Fees**

The *Homeowner Protection Act* and Regulations require residential builders to pay a licensing fee of \$600 plus \$25 per unit (when constructed). Annual renewal fees are \$500 per year plus \$25 per unit.

A \$750 per unit reconstruction fee is also required for multi-unit construction in the coastal climate zone of B.C. that goes directly to pay for the Reconstruction Loan Program for owners of homes affected by the leaky condo crisis.

##### **(1) Warranty coverage**

[New Home 2 -5 -10 year warranty]

1 year: Most defects in materials, design and labour.

2 years: Any defect in materials and labor supplied for the electrical, plumbing, heating, ventilation and air conditioning delivery and distribution systems.

Any defect in materials and labor supplied for the exterior cladding, caulking, windows and doors that may lead to detachment or material damage to the new home.

Any defect in materials and labor which renders the new home unfit to live in.

5 years: Defects in the building envelope of a new home including a defect which permits unintended water penetration such that it causes, or is likely to cause, material damage to the new home.

10 years: Any defect in materials and labor that results in the failure of a load bearing part of the new home.

Any defect that causes structural damage that materially and adversely affects the use of the new home for residential occupancy.

[Envelope Renovation Work]

As of September 30, 2000, building envelope renovators also must be licensed by the Homeowner Protection Office and arrange for third-party repair warranty insurance on repairs subject to the *Homeowner Protection Act*.

Minimum coverage and standards for warranty insurance covering applicable building envelope

renovations are now set by regulations. The coverage includes 2 years on labour and materials and a 5-year warranty on the building envelope including water penetration.

#### **4-2-3-7. Dispute**

The regulations provide for third-party mediation of disputes between owners and warranty providers. This process can be initiated at the sole option of the owners. This process is performed independently of the Homeowner Protection Office.

#### **4-2-3-8. Owner-built Homes**

An owner-builder is defined as an individual who builds a single, detached home for their own personal use. They are not required to be licensed or provide home warranty insurance on their home. An Owner Builder Declaration and Disclosure Notice must be obtained from the HPO in order to obtain a building permit or commence construction. An individual can only build an owner-built home once in any 18-month period and has a legal obligation to subsequent owners for defects if the home is sold within 10-years.

#### **4-2-3-9. Statistics**

Should be updated right before the conference or taken from our 2004-2005 annual report that will be released in June 2005.

## **4-2-4. Manitoba**

### **4-2-4-1. History**

Start of the Program: 1976

### **4-2-4-2. Participation in the System**

Voluntary

### **4-2-4-3. Construction Standard**

- Manitoba Building Code
- NHW Standards

### **4-2-4-4. Major Warranty Provider**

Manitoba New Home Warranty Program

### **4-2-4-5. Overview of Manitoba New Home Warranty Program**

#### **1) Non-profit organization**

#### **2) Warranty coverage**

The Program offers a five-year warranty, broken into two major categories:

##### **○ Year one: Materials and Workmanship**

The Program warrants that, during the first year, the Registered Builder will repair Defects in Materials and Workmanship as defined in the Program's Warranty Certificate. The Program will ensure that the necessary work is complete up to a max of \$30,000 per residential unit. Materials and Workmanship covered by the Program include those supplied and installed by the Registered Builder, its employees and those trades and others contracted directly by the Registered Builder.

##### **○ Years One to Five: Major Structural Defects**

Structural Defects affecting the load bearing portion of new homes are protected over the entire five year period up to max of \$30,000 per residential unit. In the event consumers move out while major structural repairs are underway, the warranty allows for an additional relocation expense up to a max of \$3,000.

##### **○ Deposit Coverage**

The Program provides coverage in relation to down payments provided to Registered Builder Members, up to a max of \$10,000 per new home. Included in the deposit coverage are Trust Deposits given by a Realtor to the Registered Builder, with written authorization from the purchaser.

### **3) Types of Homes Covered**

The Program covers new homes built on site with permanent foundations and new ready-to-move homes (RTM's) moved onto a permanent foundation. These new homes must have been built for sale or under contract by a Registered Builder member of the Program. This includes single detached homes, semi-detached homes, homes located within First Nation lands, row housing, duplexes, and condominium units located within buildings up to 3 stories in height. Homes not eligible for coverage are renovated homes or additions, recreational homes, mobile homes, and condominium units located in buildings greater than three stories in height.

### **4) Builder Registration**

The capacity of New Home Warranty to provide the guarantees to protect the new home buyer is contained in a contract into by the New Home Warranty with the builder, commonly referred to as "The Agreement with Builder."

In the contract, the builder assigns to New Home Warranty the right to administer the terms of warranty; that is to monitor the builders' construction practices, to resolve disputes that arise between the builder and his purchaser, to enforce compliance to dispute resolution process findings, to carry out the terms of warranty should the builder default or fail to carry out the terms of the warranty, and within the limits of the warranty the builder undertakes to reimburse the Warranty Program for any costs incurred to settle bona-fide warranty claims. The Warranty Programs have developed processes to measure the technical skills of a builder applicant, in addition to measuring a builder's financial capacity; that is to finance the initial construction and to ensure that the builder has sufficient funds available to service the home throughout the warranty period. As such, the New Home Warranty Programs have taken on the responsibility and have been recognized as the sole means of builder vetting.

Once qualified and registered, a builder is required to provide the benefit of warranty to all residential construction eligible for warranty coverage. Further, Registered Builders are monitored on an on-going basis, and are subject to annual renewal requirements.

### **5) Fees**

Builder Registration	\$500 (Builder Renewal \$175)
Home Enrollments	\$150 to \$460 Sliding Scale

### **6) Dispute**

Through the processes of Mediation and Conciliation, the Program can provide the means to effectively settle disputes between homeowners and Builder Members.

### **7) Share**

Builders Registered 121  
Home Enrolled Since Inception 41,100

## 4-2-5. Ontario

### 4-2-5-1. Overview of Tarion Warranty Corporation and its Mandate

Tarion Warranty Corporation (formerly called the Ontario New Home Warranty Program) (“Tarion”) was established in 1976 as a private, non-profit corporation designated to administer the *Ontario New Home Warranties Plan Act* (the “Act”). Tarion was created by letters patent under the *Ontario Corporations Act*. Tarion is not a government body, crown agent or public insurance body. It receives no government funding and is financed entirely from builder registration, renewal and home enrolment fees.

The Act is a unique statute in that it provides mandatory and universal coverage for all purchasers of new homes whether or not the builder is registered or the home is enrolled with Tarion. It is also unique in that it delegates responsibility for builder licensing, conciliation of warranty disputes and financial compensation to a single entity, namely Tarion. The intent of the Act is to create a consumer protection scheme designed to protect consumers from incompetent or financially irresponsible vendors and builders (collectively referred to as “builders” in this paper), and to avoid expensive multi-party litigation.

As the self-regulating body of Ontario’s new home building industry, Tarion registers new home vendors and builders, enrolls new homes, investigates illegal building practices, resolves warranty disputes between builders and homeowners, and promotes high standards of construction among Ontario’s new home builders. Tarion also works with the building industry to help educate new home buyers regarding their warranty rights and ways to protect and maintain their warranty. Under the Act, therefore, Tarion plays three important roles:

1. **Regulator:** In its role as regulator, Tarion registers builders of new homes in Ontario; imposes terms and conditions on registration, such as security requirements and limits on the number of homes that may be built; and revokes registrations.
2. **Surety:** Tarion maintains a guarantee fund and pays claims and/or arranges for necessary repairs when builders fail to comply with their warranty obligations under the Act.
3. **Conciliator/Adjudicator:** Tarion conciliates disputes between builders and homeowners, and determines the validity of warranty claims.

### 4-2-5-2. Tarion as Regulator

One of the most significant provisions of the Act is section 6, which prohibits a person from acting as a builder in Ontario without being registered by the Registrar under the Act. Registration must be done on an annual basis. At the end of 2004, there were 5,394 registered builders in Ontario. Failure to register as a builder is provincial offence, and subject to prosecution under the *Ontario Provincial Offences Act* (with a maximum fine of \$100,000 and a maximum term of imprisonment of 1 year).

The purpose of the registration process is to ensure that builders in Ontario pay the required fees to maintain the guarantee fund, and meet and maintain: financial capabilities to fulfill their warranty obligations, technical competence, honest and integrity, and a good after sales service record. The Act sets out criteria for registration, and the grounds upon which Tarion may revoke a registration, refuse to register an applicant or refuse to renew registration. A builder may appeal Tarion’s decision to refuse/revoke/refuse to renew its application to the Licence Appeal Tribunal, a quasi-judicial administrative body established by the Ontario government.

The Act also establishes terms and conditions that attach to every registration. For example, builders must diligently perform their obligations under the Act, and must indemnify Tarion for any losses Tarion suffers as a result of the builder's default. The Registrar may also attach additional terms and conditions to a particular registration; for example, the requirement to post security (in the form of cash, bond or letter of credit) with Tarion for each home built, or a limit on the number of homes a builder can build. A builder's failure to comply with the terms and conditions of registration can lead to revocation of its licence, as outlined above.

Builders are also required under the Act to enroll with Tarion each new home they build, and to pay the required enrolment fee. The home must be enrolled prior to the commencement of construction. The enrolment fee is based on a sliding scale (ranging from \$350 to \$750 (Cdn)), depending on the sale price of the home. Most builders include the enrolment fee in the purchase price of the home (either implicitly included in the sale price or as a line item on the Statement of Adjustments at closing). There were approximately 75,000 homes enrolled in 2004, and the number of homes under warranty reached 433,659.

### **4-2-5-3. Tarion as Surety - Warranty Protection under the Act**

The Act provides certain statutory warranties that all vendors are deemed to provide to new home purchasers and owners. The warranties flow from the builder, and Tarion essentially acts as the guarantor of the builder's warranty when the builder is unable or unwilling to meet its warranty obligations. In 2004, Tarion paid over \$12 million (Cdn) in claims to purchasers and homeowners. The statutory warranties take effect when the home (freehold or condominium) is "completed for the owner's possession". The Act also provides for a separate warranty on the common elements of a condominium (to a maximum of \$2.5 million, and which take effect from the date of registration of the declaration that creates the condominium corporation). The statutory warranties are enforceable even though there may be no privity of contract between the owner and the builder; that is, the warranties accrue to the benefit of subsequent owners, until the expiry of the applicable warranty periods.

The limit of coverage for freehold homes and condominium units is \$150,000.

The statutory warranties are as follows:

#### ***Construction Defects***

##### One-year Warranties

The Act provides that for one-year from the date of possession, the builder warrants that the home is:

- Free from defects in work and materials;
- Fit to live in; and
- Constructed in accordance with the *Ontario Building Code*.

##### Two-year Warranties

The Act provides that for two years from the date of possession, the builder warrants that the home is free from:

- Water penetration through the basement or foundation;



- Defects in the building envelope, such as caulking, windows and doors, that result in water penetration;
- Defects in work and materials in the electrical, plumbing and heating delivery and distribution systems;
- Defects in work and materials which result in the detachment, displacement or physical deterioration of exterior cladding; and
- Violations of the *Ontario Building Code's* health and safety provisions.

### Seven-year Warranty

The Act provides that for seven years from the date of possession, the builder warrants that the home is free of major structural defects, which is defined as follows:

- Any defect in work or materials that results in failure of a load-bearing part of the home's structure, or that materially and adversely affects its load bearing capacity; or
- Any defect in work or materials that materially and adversely affects the use of the home for the purpose for which it was intended.

There are certain exceptions to the definition outlined above.

All the construction warranties outlined above also apply separately to the common elements of a condominium (to a maximum of \$2.5 million (Cdn)).

### ***Substitution Warranties***

The Act also sets out the rights and limitations of a builder to substitute materials during construction of the home. These rights and limitations depend on whether the items substituted are "selected items" or "referred items".

#### Selected Items

For those items of construction or finishing for which the purchaser is entitled to make a selection pursuant to the purchase agreement, the builder warrants that there will be no substitutions without written consent from the purchaser. "Selected items" are items that are not specified in the purchase agreement, but selected by the purchaser from the builder's samples usually after signing of the agreement of purchase and sale. Typically, these are finishing items involving colour and materials. Some exceptions apply to this warranty. The measure of damages in substitutions where the purchaser is given a choice to select from the builder's samples is the full replacement cost of whatever the owner originally selected, including the cost of re-installing the item.

#### Referred Items

These are items referred to in the purchase agreement that are not to be selected by the purchaser. These items can be substituted by the builder without the owner's consent, but the builder warrants that if a substitution is made, it will be of equal or better quality than the item referred to in the purchase agreement. Where a substitution occurs, the owner is only entitled to the difference in value between the specified item and the substituted item because the breach is not in making a substitution, which the builder is entitled to do as long as the item is of equal or better quality, but in failing to give at least equal quality. For example, the owner would be entitled to the difference in price between the round bathtub specified in the purchase agreement and the square bathtub substituted, if the latter was of lesser quality.

### ***Delayed Closing***

The Act creates a one-year warranty for delayed closing and occupancy without adequate notice. The “delayed closing” warranty applies to freehold homes, and the “delayed occupancy” warranty applies to condominium units. This is not a warranty against delays *per se*, but rather a warranty that the vendor will provide adequate notice of the delay and will not exceed the maximum delay permitted. Not all delays are compensated – delays beyond the control of the builder, such as strikes, fires, floods or “acts of God” are exempted from coverage.

Under this warranty, compensation is provided for expenses incurred by the purchaser that are directly caused by the delay (e.g. hotel accommodation, meals, storage expenses), to a maximum of \$5,000.

### ***Deposit Protection***

Under the Act, a purchaser’s deposit is protected if a builder cannot or will not complete the sale through no fault of the purchaser. The limit of coverage for a deposit refund claim for freehold homes is \$40,000. Condominium purchasers’ deposits are protected up to \$20,000 by Tarion, and deposits above this amount are protected by the trust provisions of the Ontario *Condominium Act*.

## **4-2-5-4. Tarion as Conciliator/Adjudicator**

Tarion conciliates disputes between builders and homeowners under the Act, and determines the validity of warranty claims. When Tarion receives a claim from a homeowner, a builder is given a reasonable opportunity to repair the deficiency. If the builder does not address the problem, Tarion conducts an inspection of the complaint to determine if it is warranted under the Act. Tarion’s inspectors (called Field Claim Representatives), have many years of experience in the new home construction industry (some are engineers or former building officials) and extensive knowledge of the *Ontario Building Code* and industry standards. If the problem is determined to be warranted, the builder is ordered by Tarion to address the deficiency. If this is not done within a very short time frame, Tarion steps in to address the problem directly, either by arranging for necessary repairs or paying compensation to the homeowners.

In 2003, Tarion introduced the new Customer Service Standard, which provides for minimum after-sales warranty standards and repair timelines that Tarion requires from builders.

## **4-2-5-5. Governance of Tarion**

Tarion is governed by a Board of Directors with 15 members representing key stakeholders within the new housing industry in Ontario, including builders, consumer advocates, the financial community, and provincial and municipal governments. The Act provides for the appointment of a Registrar (currently Gregory Gee), who is appointed by the Board of Directors in the dual role of President and Registrar of Tarion.

Tarion is not regulated by the legislation in Ontario and Canada applicable to financial institutions, like banks and insurance companies. However, Tarion voluntarily follows the Minimum Capital Adequacy Tests (MCAT) and other reserving requirements set out in this legislation. At present, Tarion has approximately \$250 million (Cdn) in its guarantee fund to satisfy future claims by homeowners, and about \$50 million (Cdn) of this amount is appropriated surplus (capital).

## 4-2-5-6. Tarion's Operations

Tarion's Corporate Office (made up of the following departments: Corporate Affairs, Finance, Law, Human Resources and Information Systems) is located in Toronto, Ontario, along with its Central Operations Group and new Customer Centre. Tarion also has a Western Office in London, Ontario, and an Eastern Office in Ottawa , Ontario.

The Central Operations Group, made up of approximately 150 employees, is comprised of the following departments:

- Claims: manages all claims throughout the province, including conducting of home inspections;
- Licensing & Underwriting: registers all vendors and builders (including the taking of security) and enrolls all new homes;
- Builder Relations: liaises with builders and identifies industry issues and trends; and
- Enforcement: identifies and investigates illegal building activity (i.e. a builder's failure to register with Tarion and enroll each home).<sup>1</sup>
- Contact Centre: manages all telephone and email inquiries (on average, about 1,000 per day), processes all forms received from homeowners and schedules all home inspections.

Over the past three years, Tarion has enrolled an average of about 76,000 new housing units per year. The Corporation currently has about 230 employees.

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<sup>1</sup> This Department is comprised of nine former police officers. In 2004, Tarion's Enforcement staff identified over 5,000 unenrolled homes, which led to the collection of \$2.8 million in related enrollment fees. In 2004, Tarion obtained 467 convictions and collected 575,000 in fines (payable to the Receiver General of Ontario). Two builders (both repeat offenders) were each sentenced to jail for six months.

## **4-2-6. Quebec**

### **4-2-6-1. History**

Start of the voluntary Program: 1976

### **4-2-6-2. Participation in the System**

Mandatory since January 1, 1999

### **4-2-6-3. Construction Standard**

- Quebec Building Code
- Quebec Energy Code
- Quebec Construction Bylaws

### **4-2-6-4. Major Warranty Providers**

- LA GARANTIE DES MAISON NEUVES DE L'APCHQ (80% market share)
  - QUALITÉ HABITATION (19% market share)
- LA GARANTIE DES MAÎTRES BÂTISSEURS (1% market share)

Supervision by a government agency : Régie du batiment du Quebec

### **4-2-6-5. Guarantee Plan supervised by the Regie du batiment du Quebec**

#### **• Outline**

The guarantee plan for new residential buildings, which is mandatory for all the new buildings contemplated, gives the buyer an affordably priced basic guarantee and well defined coverage. The plan provides a fast, impartial and accessible procedure for processing claims and settling disputes (mediation, arbitration). In addition, it is easy for the buyer to check whether the building he wishes to purchase is guaranteed.

Three (3) private managers, accredited by the Regie du batiment du Quebec administer the plan. Each must do so in a transparent fashion and must render account of his activities to the Regie annually. The contractor must adhere to one of the approved guarantee plans providers and hold a specific license authorizing him to work in the field of new residential construction. The future buyer of a new dwelling can easily check with the Regie to find out whether the contractor with whom he wants to deal holds the licence.

The guarantee plan for new residential buildings also assures the buyer that the home he purchases meets standards for quality. To be able to offer the plan, the contractor must prove he is qualified and carry out the pre-inspection required by the plan manager.

Only buildings intended mainly for residential purposes are covered by the plan.

Only buildings for which the purchase contract or business contract is signed by the beneficiary and an accredited contractor as of January 1, 1999 will be covered by the plan.

The guarantee is transferable to any eligible subsequent buyer, for the remaining term of the guarantee.

- **Quality Control**

Only a general contractor accredited by a manager of the guarantee plan is authorized to construct a building contemplated by the plan. To be accredited, the contractor must meet the professional and financial requirements laid down in the Regulation respecting the guarantee plan for new residential buildings. He must also hold a special licence issued by the Regie du batiment du Quebec.

Before signing a contract with a contractor for the purchase of a building contemplated by the guarantee, the buyer also must check with the Regie to ensure that the contractor is indeed accredited and that he holds the appropriate licence. The same applies if the contract is signed with a promoter, who must meet the same regulatory requirements as the contractor.

- **Contractual Documents**

The guarantee contract is given to the beneficiary at the time of the building contract and must contain a description of the coverage and the dispute settlement procedures stipulated in the regulation.

It must be approved by the Regie and contain the number and date of the decision of the Regie.

- **Warranty Coverage**

**Before the buyer takes possession**

The buyer has coverage for his partial payments up to \$30,000 or for completion of the work described in the original contract and of supplementary work agreed upon in writing. The plan also provides for compensation of up to \$5,000 for expenses incurred by the buyer for the relocation, moving and storage of his property if the building is not delivered on the anticipated date.

Before taking possession of the building, the buyer carries out a mandatory inspection on the basis of a pre-established list of items to be checked. The list is furnished by the plan manager. The inspection is carried out in the presence of the contractor, and the buyer may be accompanied by a person of his choice.

**After the buyer takes possession**

The plan guarantees completion of the work and repairs to defects and poor workmanship indicated in writing at the time of acceptance of the building or, if the beneficiary has not moved into the building, in the three days following acceptance.

The plan also covers repairs to:

- Existing but not apparent defects discovered within the year following the buyer's taking possession
- Hidden defects discovered within three years of the buyer's taking possession

- Faulty design, construction or production and the unfavorable nature of the ground, discovered within five years of the end of the work

- **Fees**

Builder Registration      375\$ (Builder Renewal 325\$)  
Home Enrollments  
800\$ to 1100\$ per Unit. Sliding Scale for Cooperative Housing

- **Dispute**

In the event of a dispute with the contractor, the guarantee plan provides the buyer with coverage for his partial payments, and for defects and faulty workmanship.

- Mediation

If mediation is sought by both parties, the mediator is chosen from a list established by the Minister of Labor. If an agreement is reached, it is binding on the contractor, the beneficiary and the plan manager. If mediation fails in whole or in part, the dispute must be submitted to arbitration. Mediation fees are shared equally by the contractor, the beneficiary and the plan manager if he intervenes in the mediation.

- Arbitration

The application for arbitration must be sent to an arbitration body authorized by the Regie du batiment.

The body sees to the appointment of an arbitrator chosen from a list drawn up by the body beforehand and sent to the Regie du batiment.

The body must give the parties concerned an explanatory document concerning the arbitration procedure. Measures required to preserve the building may be requested before or during the arbitration proceedings.

The buyer, contractor and plan manager are bound by the decision of the arbitrator, which is final and without appeal.

When the contractor applies for arbitration, the arbitration fees are shared equally by the applicant and the plan manager. When the buyer applies for the arbitration, the fees are charged to the plan manager, unless the buyer fails to obtain a favorable decision on any of the elements of his claim. The reasonable costs incurred by the beneficiary for relevant expert opinions must be reimbursed to him if he wins his case in whole or in part. Other expenses incurred by the buyer, the contractor and the plan manager for the arbitration is borne by each one of them.

- **Share**

Builders Registered      4 667 in total (3348 with APCHQ)  
Home Enrolled      Approximately 15 000 to 25 000 units per year

## **4-2-7. Saskatchewan**

### **4-2-7-1. History**

Start of the Program: 1976

The New Home Warranty Program of Saskatchewan, Inc. was formed by the building industry in May 1976 as a solution to the growing demand for new homebuyer protection. Its purpose was to provide consumer confidence in builders and to protect the investment made by owners in their new homes.

### **4-2-7-2. Participation in the System**

Voluntary

### **4-2-7-3. Major Warranty Providers**

The New Home Warranty Program of Saskatchewan, Inc. (NHWP)

It is incorporated as a private non-profit corporation. It is headquartered in Saskatoon with a Branch Office in Regina. The Program is governed by a Board of Directors elected by the builder members.

Operations of the Program are paid for through membership fees and a fee charged to enroll each house. Membership in the NHWP is voluntary, although both Canada Mortgage and Housing Corporation (CMHC) and its private equivalent, Genworth Financial Canada require the builder to belong to a Warranty Program in order to receive mortgage insurance on high ratio loans (90% or higher).

The New Home Warranty Program provides a third party guarantee of the builder's warranty and undertakes to perform the builder's warranty obligations should the builder default.

All builder members of the NHWP register all their eligible units, which consists of all for-sale housing of the following type: single family houses, semi-detached homes, townhomes, low-rise buildings up to four stories, as well as ready to move homes (RTM's).

### **4-2-7-4. Construction Standard**

- Saskatchewan Building Code
- NHWP Performance Standards

### **4-2-7-5. Warranty Coverage**

#### **Deposit Protection**

For all houses registered after January 1st, 2003, the initial deposit for the purchase of a new home is protected for 15% of the purchase price up to a maximum of \$25,000 in the event the deposit becomes legally refundable and cannot be recovered because of bankruptcy, default, insolvency or fraud on the part of the builder. It does not cover reimbursement because of a

contract dispute between the parties.

### **Workmanship And Materials Protection — One year**

All Registered Builders are required to warrant that the house is constructed in accordance with the building standards prescribed by the Province of Saskatchewan and that the house is free from defects in workmanship and materials for a period of one year from the date of possession.

### **Water Leaks Protection — Two years**

Registered Builders warrant that the building envelope (roof, exterior cladding, windows and doors) and the basement foundation walls will be free of exterior water penetration for two years from original occupancy.

### **Major Structural Defects Protection — Five years**

All registered builders warrant that the houses they built will be protected against major structural defects for five years from the date of possession. Major structural defects mean defects in workmanship or material which have or are likely to have an adverse effect on the performance of the load bearing portion of the home such as footings, piles, basement walls, beams, floor joists, teleposts, load bearing walls, and roof trusses.

The total combined limit of protection for workmanship and materials, water leaks and major structural defects is \$50,000 for all houses enrolled by the builder after January 1st, 1998.

## **4-2-7-6. Fees**

<b>Builder Registration</b>	\$ 500 initial application; \$280 annual renewal fee
<b>Home Enrollments</b>	\$300 to \$600 Sliding Scale depending on house price and builder risk level.

## **4-2-7-7. Dispute**

### **Conciliation**

If the builder does not respond, there is a dispute resolution process called “Conciliation.” On receipt of a completed “Request for Conciliation” form from the purchaser and a \$100 fee, the NHWP will engage an independent Conciliator (usually an engineer) to investigate the dispute. The Conciliator will provide a written decision, which is binding on both parties and outlines the builder’s responsibility (if any) for warranty repairs. If the builder is found to be responsible for repairs, a deadline is established for completion. If the builder does not complete the repairs within the time frame allotted, the NHWP ensures that the work is completed as per the Conciliator’s decision.

## **4-2-7-8. Share**

Builders Registered	134
Homes under warranty	9,012



## **4-3.China**

### **4-3-1. Housing Circumstances**

#### **4-3-1-1.History**

In China, after reform opening policy was carried out in 1978, the economy grew rapidly and steadily. The national income increased and the house construction expanded every year. Especially by the city housing revolution in 1990s the government stopped providing houses directly and adopted commercial houses program, more houses were constructed and many real estate developer were born.

Quantity of Chinese house construction is about 1,300,000,000 m<sup>2</sup>. Compared with other countries it is very large number. It is 10 times much as 1978's, but it is considered that this trend will keep on going because there still remain many old houses in rural area, the floor area per person is small and the government is taking policy of urbanism.

#### **4-3-1-2.Total Number of Houses (floor area)**

The total number of houses amounts up to about 8,900,000,000 m<sup>2</sup> in urban area by the end of 2003 (National Bureau of Statistic China). By the way, other statistics indicates that city population holds about 41% of all population with about 520,000,000.

#### **4-3-1-3.Tenure**

The percentage of owner-occupied houses is up to 80.17% in urban area (Ministry of Construction). It is very high figure compared with other countries. It is because during the city housing revolution in 1990s, public-owned houses were all sold off to the residents.

#### **4-3-1-4.Structure and Types of Buildings**

Most of the houses in city are made of reinforced concrete and condominium. Detached houses locate in suburb, but a few. Traditional brick houses still remain in the center of the city. But the number is decreasing because of urban renewal public enterprise.

#### **4-3-1-5.Home Warranty Program**

Housing quality improvement has been one of the most important point of the city housing revolution. Home warranty system against housing "defect" is legally established as "Construction Quality Management Act" in 2000. But it regulates only the housing developer and the constructor. So, in 2001 "Commercial Buildings Sale Management Regulation" was established which obliges housing developer to execute home warranty program for customer with handing over "Home Warranty Certification".

And because of this background, there is no group of housing constructor and no registration system of constructor or house such as OHW in Japan or NHBC in the UK.

## **4-3-2. Quality warranty for newly constructed houses (Warranty against housing “defect”)**

### **4-3-2-1. Building Law**

Basic policy of quality warranty for newly constructed houses is based on “Building Law” established in 1997.

Article 62 of the Building Law describes ‘Anyone who constructs buildings must execute warranty program’.

### **4-3-2-2. Construction Quality Management Act**

Based on Building Law the specific regulation is provided in “Construction Quality Management Act” established in 2000.

When construction is completed and condominium is delivered from constructor to developer (temporary owner), the constructor must hand over “Home Warranty Certification” . In the certification, coverage and period of warranty including reform works and responsibility for the defect should be described. The constructor is obliged to reform the house, when any defect within coverage and period is found. And the compensation of loss is also obliged.

Warranty period is different according to the part of the house. Generally speaking, warranty period of facilities and interior decorations is 2 years. Main structure is according to the designed term.

### **4-3-2-3. Commercial Buildings Sale Management Regulation**

“Building Law” and “Construction Quality Management Act” are limited to the relation between the housing developer and the constructor. After “Commercial Buildings Sale Management Regulation” was established in 2001, the housing developer must execute home warranty program for consumer who purchase the house. Incidentally, in China most of the city houses are condominiums sold by the housing developer. There are few houses for rent or self-built detached house. Therefore most of the houses are under the regulation.

This regulation obliges the housing developer to give the purchaser “Home Warranty Certification” and “Housing Instruction” . In the certification, coverage and period of warranty including reform works and responsibility for the defect should be described as the Construction Quality Management Act’ s one .

The warranty period is start from ownership transfer. It must not be shorter than the rest warranty period of The Act and must not be shorter than the minimum warranty period prescribed in “Rule of Home Warranty Certification and Housing Instruction applied to commercial house” established in 1998. In the Rule, minimum warranty period is, generally speaking, 1 year for facilities and interior decorations, 3 years for roof waterproof, reasonable period for main structure (usually 10 years)

## **4-3-3. Warranty Insurance**

### **4-3-3-1. Housing Quality Warranty Insurance by The People's Insurance Company of China (PICC)**

#### Background

As mentioned before, the city housing revolution in 1990s promoted house production and trading in the market and upgraded housing quality. As a part of the strategy, "Housing performance evaluation program" and "Housing Quality Warranty Insurance" have been executed.

#### Brief of the program

In 2002 PICC started Housing Quality Warranty Insurance for the first time in China. The insurance contractor who contracts with PICC and pays insurance premium is housing developer. The insured who receives insurance is house purchaser.

The objects of the insurance are the houses which were evaluated "A" by Housing performance evaluation program. The housing developer which sell the house and PICC make a contract of insurance. To make a contract or not is optional.

According to the "Housing Quality Warranty Insurance Provision", warranty period is 10 years for main structure and important parts to safety, 5 years for other parts. It starts 1 year after the construction completion.

#### Dispute Settlement

When the dispute about the insurance application occurs among housing developer, purchaser and insurance company, first stage is negotiation among the 3 groups. But if the negotiation is not going well, the second stage is the arbitration by the committee or legal action to The People's Court. This choice should be prescribed in advance on the insurance bill.

#### Insurance Premium

Insurance Premium rate of PICC Housing Quality Warranty Insurance is 5% in principle. But according to the house situation, it might change within 20% range. Insurance Premium is set before sales. If actual price is different from planned price, the difference will be adjusted.

#### Achievement

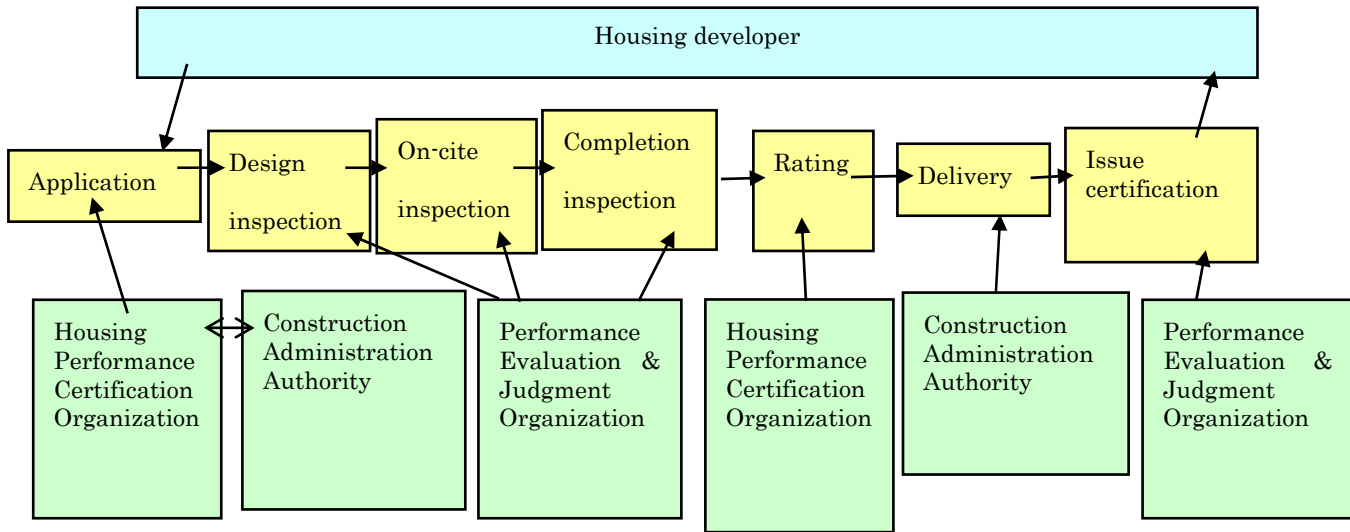
Some of the contracted houses are reported on the newspaper, but the number is not released.

### **4-3-3-2. Housing Performance Evaluation Program**

Housing Performance Evaluation Program is prerequisite condition of Housing Quality Warranty Insurance. This program started in 1999 as a pilot program. In 2005, Housing Performance Technical Standard will be issued and the evaluation program will be officially established.

The procedure of the program is as below.

The procedure of the Housing Performance Evaluation



Housing Performance Certification Organization certifies housing performance. But according to the objective data and standard, Performance Evaluation & Judgment Organization evaluates and judge the performance.

Performance Evaluation & Judgment Organization inspects design stage, constructing stage, completion stage. Quality controls in other countries is executed in this procedure.

According to the total points an 5 category points, performance grade is decided. The grade is A and B. A grade is divided into 3A, 2A and 1A.

### **4-3-3-3. Other information (Construction Quality Warranty Insurance Regulation (Tentative Scheme))**

To assure buildings quality, Ministry of Construction is arranging Construction Quality Warranty Insurance Regulation. Content is not clear now, but it is reported that without insurance contract, starting construction will be restricted and selling houses will not be permitted. It is also reported that after 1 or 2 years trial, official regulation will be established.

## **4-4. France**

### **4-4-1. History**

The history of home warranty in France goes back to the Code of Napoleon enforced in March 1804 that established the concept of liability for defects. The Code said that if a part or whole of a building lost its shape or intended function because of a defect, its architect or builder had to bear an absolute liability for 10 years that could not be circumvented by any exceptional clause. In 1967 the Code was revised and the liability period was shortened to 2 years except for a defective work in the structural part.

In 1928 an insurance product to back up this liability from financial aspect came into the market that is the origin of the present warranty program. This insurance product played a driving force for development of the systems of site inspections and rating of builders. The French home warranty system could be formed by combining general programs based on the individual needs. Those general programs have been established based on the forcible provisions of the Civil Code. It is characteristic comparing with the home warranty programs in other countries that have been established only for warranty of housing and operated by the specialized organizations.

However, there was a critical problem when a dispute arose and the case was brought to the court. It took 8 years in average to reach the final decision during which the defect was left without any substantial repair.

The design or planning of the buildings in France in general tends to emphasize designing itself not much the function. This has created an insufficient check (inspection) system against a defect during the designing stage. In particular, since 1967, the building permit delivered by the public authority only assesses the conformity with city planning rules and does not include any technical validation of the design of the works.

As a result, though consumer protection in the legal frame has been well developed, it did not practically help decrease occurrence of the defects and defects were found frequently, and the repair works were delayed. As for consumers, they were not protected as intended and, even worse, they suffered from the damages including the litigation cost.

In 1978 the Spinetta Law was introduced in order to prompt the necessary repair work, to avoid occurrence of defects and to clarify the responsibility by each professional. The changes were drastic and the followings are the major points:

- 1) Identification and clarification of liability;
- 2) Introduction of inspection system;
- 3) Restructuring of insurance scheme (proactive use of claim for indemnity)

### **4-4-2. Outline of the System under the Spinetta Law**

#### **(1) Liability systems**

The Spinetta Law says that all parties engaging in the construction work including the design stage who have exchanged a contract with the client are liable for 10 years for the damage that would impair solidity of the structure or the intended use of the building (10-year Liability) and for 2 years for other construction works, materials and members of the building (2-year Liability -- warranty for functions). Both 10-year Liability and 2-year Liability could not be deleted nor altered.

In regard to a flaw found after delivery of the building (including sound insulation), the

builder is liable for one year within the scope of completion warranty. The warranty starts when the building is hand over. There is no clear definition in regard to a warrantable defect or damage, and the final decision is left to the court.

## **(2) Coverage**

Wide range of buildings is covered by 10-year Liability including houses. 10-year Liability is also applied to the repair work of the defect. Maintenance work for existing buildings are not covered, however renovation works such as implementation of central heating system or elevators are covered.

## **(3) Damage**

The Spinetta Law is edited using more concrete terms, and the “damage” is clearly defined to distinguish from “defect”. The damage means a physical damage occurred directly in the building and does not mean an economical damage such as increase of construction fee caused by the damage. Those damages would be attributed to delinquency or miscalculation of the building producer.

### **(3) - 1 Damage to solidity**

The application of 10-year warranty for damage to solidity of the building is limited to the critical or major damage. The evaluation of degree of the damage is left to the judge.

The warranty could be used by claiming either damage to solidity or to the intended use of the building.

### **(3) - 2 Damage to the intended use of the building**

Criterion of judgment by a legislator whether the damage is warrantable or not is that if the condition “would disturb the occupant, which degree is unacceptable”. The followings are the defects which have been determined by the Supreme Court in the past:

- The danger of fire breaking because of a defective work of implementation of electric equipment;
- Condensation inside the walls;
- Flaw in the exterior waterproof envelope;
- Defect in the central heating equipment.

The examples above have led the following conditions to define the defect as a warrantable damage:

- Rainwater leakage that would influence on the roof of the building or disturb the normal living condition;
- Noise generated from the central heating equipment that is abnormal or unacceptable;
- Defect of air-conditioning equipment in the airtight area.

The following conditions are not warrantable:

- Flaking of exterior concrete that would not jeopardize the safety of an occupant;
- Inadequate waterproofing performance at the joints of balcony.

## **4-4-3. Uniqueness of the System - Double Compulsory Insurance System**

A double compulsory insurance system for housing is characteristic in the French warranty

scheme. Since it is a compulsory system, the Central Premium Rate Committee would make the final decision of the insurance premium.

### **(1) Compulsory Liability Insurance**

Compulsory liability insurance has been legally imposed on the parties including a builder, an architect, an engineer, a developer, an agent, producers or suppliers of the parts and a realtor. Those people should bear 10-year liability, and the builder has liability of completion. Before the Civil Code was revised, it was only an architect who was obliged to take out the liability insurance.

Insurance premium and the deductible are set in an individual contract. Since this is a compulsory insurance, any conflict in regard to insurance contract could be referred to the Central Premium Rate Committee.

### **(2) Compulsory Non-life Insurance**

The old system had to clarify where responsibility lies before deciding the final repair cost to be paid to the insured. This time-consuming system did not achieve the major purpose of the system, protection of an owner. This is the reason to adapt non-life insurance along with the liability insurance considering the following features: 1) the insurance money will be paid even if the responsibility issue has not been clarified; 2) if it is clear who is responsible, the already-paid insurance money could be claimed for indemnity.

The building producer (including his agent) is obliged to take out non-life insurance to insure the following damages making the owner of the building be an insured.

- a. The repair cost for a damage applicable to 10-year liability (warranty of quality)
- b. The repair (completion) cost caused by default of the building producer (warranty of execution of work)

Once the warrantable event occurs, the repair cost will be paid based on the investigation conducted by an appraiser without waiting for identification of the responsible party. At the time of insurance payment the insurer would obtain the right for subrogation of claim for indemnification and make a claim for the paid insurance amount to the party who is responsible for the event. If the case is brought to the court, the party who has been judge to be responsible for the event has to bear the legal cost from his own liability insurance.

By adopting this system the remedy for the damage will be carried out even if identification of the responsible party took a long time.

The sum insured should be the replacement value, though could be reevaluated based on the price fluctuation.

There is currently a modification of the Spinetta law, aimed at excluding fixed equipments related to an industrial activity, from the insurance coverage.

## **4-4-4. Quality Control**

### **(1) Builders' evaluation**

Organisme Professionnel de Qualification et de Classification du Batiment (OPQCB) owned 50/50 basis by the government and private sectors is an organization that evaluates the building suppliers' capability. It has a nationwide network with members from construction-related organizations. OPQCB issues a certificate that includes the rating of the

building supplier.

## **(2) Inspection**

There is a building control system in France, though it is based on the aspect of city planning. Each building is required to go through inspection in order to take out liability or fire insurance, which is carried out by private inspection companies. The first private inspection company started in 1928, and now several companies are offering the service.

The inspector should be the third party that is not involved with other stages of the building and will check not only the construction stage but check from the designing stage. The inspection fee is born by the owner of the building. An inspection company is liable for 10 years, which condition is the same as a building supplier. There are two technical standards that are not mandatory but recommended. Inspections are carried out based on these two standards.

## **(3) Organization to protect defect occurrence and improve the quality of buildings**

Because of erratic fluctuation of insurance cost, AQC (Organization to assure the quality of buildings) was established in 1982. Its aim is to prevent defects as well as to improve the quality of building, and eventually to lower the insurance cost. AQC is composed of government people, building professionals, builders' associations and representatives of the relevant organizations. The activities are: 1) statistical work and analysis of the warranted accidents, and publication – SYCODES; 2) announcement of warnings of continuous accidents; 3) study of the past accidents.

## **4-4-5. Dispute Settlement**

The dispute is brought to the court. If a person who is obliged to take out insurance is rejected by the insurance company, he/she could appeal to the Central Premium Rate Committee.

## **4-4-6. Performance Indication System**

In 1973 Qualitel was established as a housing evaluation body. The professional inspector carries out an evaluation of the house based on the set items that can be evaluated objectively (below), and the results are disclosed for a consumer to make a fair decision. Those items are the ones.

1. Plumbing (itemized into 5 relevant items)
2. Electric Equipment (2)
3. Indoor Noise (6)
4. Outdoor Noise (2)
5. Air conditioning (2)
6. Maintenance Fee of Roof and Exterior (6)
7. Cost of Heating and Hot Water (2)
8. (OPTION) Accessibility (10)

The evaluation Qualitel performs covers from the designing stage that has 5 ranks from single star to 5 stars in order for consumers to compare the quality of houses in the market. This system is voluntary, though a housing project subsidized by the government with certain scale is obliged to go through this evaluation. "Label Qualitel" will be issued for the project that has been graded over a certain rank.

In the recent years, the certification has been increasingly stressing environmental



performances of the new dwellings. In September 2005, the quality of the existing stock will also be addressed with a global technical assessment of the building, providing a quality profile, and a certification after refurbishment works, based on the new profile of quality targeted.

## **4-5. Ireland**

### **4-5-1. History**

In 1978 The National House Building Guarantee Company Limited (the Company) was established as a result of discussions between the Government and The Construction Industry Federation in order that the housing construction industry would comply with acceptable building-related standards and maintain them.

The Company operates the home warranty program called HOMEBOND in order to achieve its missions as well as to obtain the people's trust.

### **4-5-2. Operation**

The Company operates the HOMEBOND Scheme to instill greater public confidence in the industry and give protection to homeowners.

HomeBond's aims are to:

- set standards of construction;
- inspect new homes under construction;
- provide a one year complaints assessment scheme for various non-structural defects in new homes;
- protect purchasers against loss of certain stage payments in certain circumstances
- provide a 10-year warranty against major structural defects and a guarantee against water and smoke penetration for the first 2 years of the warranty period.

### **4-5-3. Membership (Registration)**

HOMEBOND membership is available for developers and builders. The Company carries out an assessment of applicants in regard to financial and technical resources and abilities.

### **4-5-4. On-site Inspection**

The member should apply for all necessary inspections: At a minimum these includes inspections of (1) the foundations and (2) the main structure immediately the roof is completed. The Company's inspectors/advisors will carry out these inspections.

### **4-5-5. Warranty Coverage**

- \* Units ..... All dwellings
- \* Coverage ..... Major structural defects (10 years)  
Water and smoke penetration (first 2 years of the warranty period)  
"The Stage Payment Bond" -- Loss of deposit or stage payments before completion of the house

### **4-5-6. The House Registration Fee**

Calculated based on the floor area of the dwelling. In case of refurbishment, the registration fee is a flat rate fee which may be increased from time to time.

## **4-5-7. Numbers**

Over 3,800 builders have enrolled as members of HOMEBOND.

## **4-5-8. Others**

- HOMEBOND offers One Year Complaints Assessment service. The purchaser can write to the registered member a claim of defects within the Complaints Period. If the builder does not respond within certain period, HOMEBOND will investigate the complaint and request the builder to remedy the situation (in those cases which HOMEBOND considers appropriate).
- HomeBond produces publications and a “House Building Manual” to promote good building practices and make people aware of the Building Regulations.
- HomeBond holds seminars around the country to promote good building practices.
- HomeBond’s advisors offer advice to builders on the Building Regulations and current standards.
- HomeBond involves itself with all agencies in Ireland relating to standards of construction in house building.

## **4-6. Japan**

### **4-6-1. Housing Situation in Japan**

#### **4-6-1-1. Total Number of Housing Units**

A housing shortage, estimated at about 4.2 million units immediately after World War II, rapidly dissolved through intensive housing construction work thereafter. In 1968, the total number of housing units exceeded that of all the households. In 2003, it reached about 1.14 times as many as the total households.

#### **4-6-1-2. Tenure**

The percentage of owner-occupied housing began to increase in 1998, reaching 61.2% in 2003. The percentage of owner-occupied housing in the three major metropolitan areas is 56.6%, and 66.1% in the rest of the country.

#### **4-6-1-3. Types of Buildings**

The percentage of detached houses is decreasing, and was 56.5% in 2003. The number of collective housing units, however, continues to increase.

#### **4-6-1-4. Structure**

Wooden structures make up about two-thirds of all the housing stock when classified by structure, but the proportion of non-wooden structures such as reinforced concrete houses and steel-frame houses, is still increasing.

#### **4-6-1-5. Present State**

The average floor area for newly-built housing units consistently increased for owner occupied housing and housing for sale. For housing for rent and company-supplied employee housing, on the other hand, it fell greatly in the 1980s when land prices soared, and subsequently increased in the 1990s due to the fall in land prices. In general, housing size is still increasing.

#### **4-6-1-6. Legal System of Home Warranty**

##### **(1) Civil Code**

In contracts in general, a “defect” is defined as “lack of qualities expected under the contract or based upon normal social conventions”. In Japanese there are many terms theoretically having the same meaning but in fact having different interpretations. Providers of buildings manipulate contracts to create wording that can be interpreted as other than “defects”.

When a defect under the contract of sale is found in a building, the seller (developer, house builder and also previous house owner) is responsible for compensating the purchaser for damage resulting from the concealed defect. The purchaser must execute the right of claim for repair within a year after finding the defects (Article 566 and 570). If the seller is a real estate professional, as described later, he can choose the above-mentioned conditions provided by the Civil Code or a warranty of two years after delivery of a building (Real Estate Trader Law, Article 40). The purchaser can cancel the contract if the defect is fatal to

achievement of the object of the contract (Article 570).

In the case of a contract for building work, the builder (contractor) is responsible for repairing the defects and compensating the orderer for damage resulting from the defects (Article 634). However, the orderer does not have the right to cancel the contract (Article 635). Duration of liability for defects is stipulated as 5 years after acceptance of the building, even if a defect is found in the ground, or 10 years for the fixed buildings (Article 638). This period is extensible for a maximum of 10 years by a special agreement (Article 639).

The Civil Code also describes the liability to compensate for damages caused by intention or culpable negligence (Article 709). On this provision, many disputes about defects lead to legal proceedings. The duration of liability is 20 years. Complaints about damage caused by defects can be made both to the builders and to concerns without any contract.

## **(2) Real Estate Trader Law**

Under the Real Estate Trader Law, any trader who sales a property (land, old building or newly constructed building) must not make a contract more disadvantageous to the purchaser in respect of liability for concealed defects than provided for in Civil Code Article 570, but can make a special contract of warranty of 2 years after delivery (Article 40, *ibid.*). It is technically and empirically unrealistic to specify a warranty period of 10 years for all kinds of defects, or 1 year after discovery. The period of 2 years across the board seems to be realistic, but not always satisfactory for consumers in general.

## **(3) Housing Quality Assurance Act**

The Housing Quality Assurance Act came into force in the year 2000 for the purpose of consumer protection. This Act has two important functions. One is enforcement of a 10-year liability for defects on a builder or seller of a newly-constructed residence. The other is establishment of a Housing Performance Indication System and the setting up of a Housing Dispute Resolution System for the indicated housing.

The 10-year liability system and performance indication system are based on the investigation of the French systems, that is, “la responsabilité decennale” and “Qualitel”.

There are, however, two material differences between the 10-year warranty systems. First, the 10-year liability in Japan can not be taken over by successive house owners. Second, no insurance is enforced on any builders, sellers, designers or anyone who are liable for defects. The 10-year liability in this Act is a special rule of the Civil Code. It applies only to contractors or sellers who build or sell the newly-constructed residence (except for non-residential buildings). It covers defects of structural performance and waterproof performance against rain. No contract which reduces the 10-year liability for a newly-constructed residence is valid. The liability for other miscellaneous defects is defined in the Civil Code or the Real Estate Trader Law.

# **4-6-2. Home Warranty Program**

## **4-6-2-1. History**

### **① Establishment of programs and organizations (background)**

The modernization of the construction industry became a key priority for the Housing Bureau of the Ministry of Construction (now the Ministry of land Transport) from the early 1960s onwards. The Bureau conducted research and surveys into problems relating to on-site construction and post-completion services, and studied measures to overcome these issues. On the basic of this work, the Construction Council proposed setting up a program to warrant

the quality of houses (establishment of the “Warranty Program for Houses”) to help create high-quality housing stock and foster housing suppliers, while providing protection for consumers, and it became an improvement policy focus for the Ministry of Construction. On April 1, 1982 the Organization for Housing Warranty (OHW), initially known as the “Registration Organization for Warranted Houses”, was established to administer the Warranty Program for Houses.

1980	<ul style="list-style-type: none"> <li>▪ Registration Organization for Warranted Houses established as a voluntary organization</li> <li>▪ Warranty Program for Houses established for new detached houses</li> </ul>
1982	<ul style="list-style-type: none"> <li>▪ Registration Organization for Warranted Houses (ROWH) established as a non-profit organization</li> <li>▪ Notification of “Enforcement of Warranty Program for Houses” distributed to prefectural governors by the Director of the Housing Production Division, Housing Bureau, Ministry of Construction</li> </ul>
1986	<ul style="list-style-type: none"> <li>▪ Warranty Program for Houses extended nationwide</li> </ul>
1992	<ul style="list-style-type: none"> <li>▪ Warranty coverage expanded to apartment buildings</li> </ul>
1997	<ul style="list-style-type: none"> <li>▪ Warranty program expanded to apartment buildings for rent</li> </ul>
1999	<ul style="list-style-type: none"> <li>▪ Name changed from Registration Organization for Warranted Houses to Organization for Housing Warranty (OHW)</li> <li>▪ Fund for Defect Warranty established</li> <li>▪ Completion Warranty Program for Houses established</li> <li>▪ Simplified measurement service of formaldehyde introduced</li> <li>▪ Building confirmation inspection services introduced</li> <li>▪ Government Housing Loan Corporation inspection services introduced</li> </ul>
2000	<ul style="list-style-type: none"> <li>▪ Programs extensively updated to reflect the introduction of the Housing Quality Assurance Act</li> <li>▪ Housing performance evaluation services introduced</li> </ul>
2001	<ul style="list-style-type: none"> <li>▪ Warranty Program for Existing Houses established</li> </ul>
2002	<ul style="list-style-type: none"> <li>▪ Warranty Program for Houses expanded to extension and alteration works above a certain size</li> </ul>
2003	<ul style="list-style-type: none"> <li>▪ Government Housing Loan Corporation compliance certification services introduced</li> </ul>

## ② Developments of the programs

The program was preceded by a trial implementation in Kushiro, Hokkaido, and the successful results led to expansion of the program nationwide from fiscal year 1982. Nationwide implementation was achieved in fiscal year 1986, following the establishment of administrative offices in all prefectures with the support of relevant organizations including prefectural governments.

Subsequently the Government Housing Loan Corporation introduced its “Durable Wooden Housing” program, which required taking out the 10-year warranty under the Warranty Program for Houses. The use of the warranty program also became a requirement for loans, interest subsidies and other preferential treatment provided by prefectural governments. Rising consumer concern about the safety and durability of housing, especially after the Great Hanshin-Awaji Earthquake of 1995, also contributed to the expanding use of the Warranty Program for Houses.

In 1999, OHW established the Fund for Defect Warranty with subsidy from the government in readiness for introduction of the Housing Quality Assurance Act in the following year. This fund was intended to ease the burden on financially weak housing suppliers who have become obliged to provide 10-year defect warranty for new houses along with the introduction of the Act. The Warranty Program for Houses was extensively updated in line with this Act.

Consumer needs in relation to housing warranties have continued to diversify. OHW

responded to this trend by establishing the following two new programs: the Completion Warranty Program for Houses in fiscal year 1999, and the Warranty Program for Existing Houses in fiscal year 2001, in addition to the Warranty Program for Houses. Also, in fiscal year 2002, the coverage of the Warranty Program for Houses was expanded to include extension and alteration works under certain conditions.

#### **4-6-2-2. Home Warranty Providers in Japan**

With the enforcement of the Housing Quality Assurance Act in 2000, there grew a need for housing warranty systems to help housing suppliers assume the liability for defects of housing. Consequently, the Organization for Housing Warranty (OHW) and other housing organizations and private companies emerged as home warranty providers.

## Home warranty providers in Japan

		<b>Organization for Housing Warranty (OHW)</b>	<b>Japan Inspection Organization corp.</b>	<b>Houseplus Corporation, Inc</b>	<b>Jutaku Anshin Hoshu K.K.</b>	<b>Japan Federation of Architects &amp; Building</b>	<b>Japan ERI Company, Limited</b>
Registration of houses		Newly-built house Extended parts of detached houses and terraced houses	Newly-built detached house and shop house by timber construction, wood frame construction, mixed structure, steel structure (up to 3 stories) Wooden apartment house	Newly-built house by timber construction, wood frame construction	Newly-built detached house	Newly-built house	Newly-built house evaluated performance by JAPAN ERI CO. LTD.
Warranty coverage		Major structural members and parts used to prevent rainwater leakage	Major structural members, parts used to prevent rainwater leakage and ground	Major structural members and parts used to prevent rainwater leakage	Major structural members and parts used to prevent rainwater leakage	Major structural members and parts used to prevent rainwater leakage	Major structural members and parts used to prevent rainwater leakage
Warranty period		10 years	10 years	10 years	10 years	10 years	10 years
Exemption from responsibility period		2 years	(Nothing)	2 years	2 years	2 years	2 years
Inspection		Following completion of the foundation structure. Following completion of the roof works.	Following completion of the foundation structure. Following completion of the structure. Following completion of the Exterior substrate works. Following completion of the building.	Following completion of the foundation structure. Following completion of the roof works.	Following completion of the foundation structure. Following completion of the roof works.	Following completion of the foundation structure. Following completion of the roof works.	Following completion of the foundation structure. Following completion of the structure. Following completion of the interior substrate works.
Registration fee	Builder registration fee	New registration ¥31,500 Renewal ¥26,250	New registration ¥31,500 Renewal ¥26,250	New registration ¥31,500 Renewal ¥26,250	New registration ¥52,500 Renewal ¥21,000	New registration ¥16,800 Renewal ¥16,800	Free (nothing)
	Example of house registration fee	Housing price × 0.5189%	¥137,550 (where floor space is under 165 m <sup>2</sup> )	Building costs × 0.4725% or 0.525%	Housing price × 0.38%	¥86,000 (where housing price is ¥20,000,000)	Housing price × 0.25%
Insurance amount		(Repair cost – 100,000) × 80%	Repair cost × about 80%	Repair cost × about 80% or 90%	Repair cost × about 80%	Repair cost × about 80%	Repair cost × about 80%
Achievement	Number of registered builders (~2004/03/31)	42,067	5,456	470	1,197	830	10
	Number of registered houses (2003/04/01~2004/03/31)	110,748 〔 Cumulative total of registered houses at the end of April 2005 is 1,005,181. 〕	23,715	3,615	1,680	365	13



## 4-6-3. OHW Warranty Program for Houses

### 4-6-3-1. Registration

#### ① Registration of Builders

Housing suppliers should be registered with OHW as registered builders to use the Warranty Program for Houses. Registration should be completed by simply submitting the application to OHW.

#### ② Registration of Houses

- Houses Eligible for Registration

Any type of newly-built house is eligible for application for registration.

- Applications for House Registration

An application for house registration should be submitted to the representative organization of OHW where the house is to be built, some time between the issuance of the construction permit and commencement of the construction work. In a case in which the house would be built for sale, the application should be submitted by either the sales agent or house builder by agreement. (The applicant would be a warrantor.)

### 4-6-3-2. Warranty Coverage

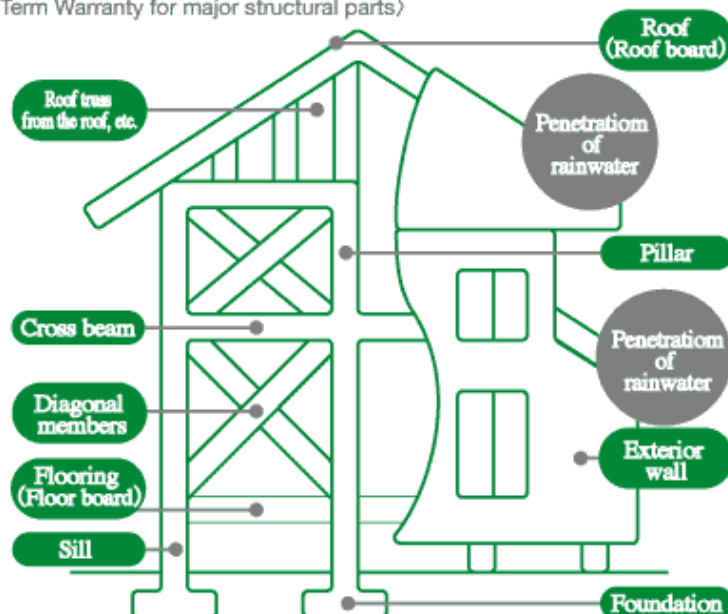
#### ① Warranty Program for Houses

The Program covers not only new houses, but also extension and renovation works above a certain size.

#### (1) Long-term Warranty...10 years

Long-Term Warranty covers major structural members and parts used to prevent rainwater leakage, as defined in the Housing Quality Assurance Act. In order to ensure the proper operation of the long-term warranty, measures such as an insurance program covering long-term warranty liability from the third year following the delivery are available.

〈Long-Term Warranty for major structural parts〉



## **(2) Short-term Warranty...1-2 years\***

Items covered by the short-term warranty include peeling of finishing materials, deformation of fittings, leaks in bathrooms, and defective equipment.

\*Up to five years for certain buildings such as apartment buildings, etc.

Detached houses	1 to 2 years	Chipped paint on finishing, warping of fittings, bathroom leaks and defective equipment
Apartment houses, etc.	2 years 2 years	Chipped tiles or stone veneers Malfunction of interior fittings or equipment

## **4-6-3-3. Quality Controls**

### **① Technical Requirements**

On the assumption that the registered builder should carry out construction work with conscience and with voluntary quality control, a site inspection would be conducted by a professional inspector to see if the house complies with the OHW Design and Construction Standards and other relevant standards.

### **② Plan Check and Site Inspection**

Every house submitted to the Warranty Program for Houses should pass the site inspections carried out by OHW in order to be registered.

Site inspections for detached houses:
First inspection: Following completion of the foundation structure
Second inspection: Following completion of the roof work

Site inspections for apartment house, etc.:
First inspection: Following completion of the foundation structure
Second inspection: Following completion of the reinforced concrete installation on the intermediate floors (Second floor from the bottom, and every seventh floor counting from the third)
Final inspection: Following completion of the roof sealing work

## **4-6-3-4. Insurance**

### **(1) Short-term Warranty**

Taking on a warranty (providing free repair work, etc.) could require huge amounts of money, and the burden of the liability could bring financial difficulty to the registered builder, which would threaten the capability of pursuing further warranty liability. In order to ensure the proper operation of the long-term warranty described above, measures are available such as an insurance program covering long-term warranty liability from the third year following the delivery of a house.

### **(2) Long-term Warranty**

Insurance amounts payable to a registered builder who carries out repair work shall be

calculated as shown below. Where a registered builder can not discharge the warranty liability due to bankruptcy, etc., a certain proportion of the repair costs for the parts covered by the long-term warranty shall be paid, including for the period of the first two years.

<Calculation of Insurance Amount> Insurance payable\*1 is calculated as follows.

		Deductible	Allowable percentage
Detached house	Insurance Amount =	(Repair Cost - ¥ 100,000)	× 80%
Apartment house, etc.	Insurance Amount =	(Repair Cost - 100,000*2)	× 80%

\*1. When using the Fund Course, a certain part of the insurance amount is paid by OHW.

\*2. The excess for an apartment house can be selected as either ¥100,000 or ¥500,000 upon application or registration of the house.

## 4-6-3-5. Dispute Settlement

### ① Way to solve

Any dispute between the owner of a registered house and the registered builder over a defect in the house can be referred to the Technical Committee, consisting of lawyers and construction specialists.

### ② Conciliation fee

A fee of ¥52,500 incl. 5% consumption tax shall be charged.

## 4-6-3-6. Registration Fee (Administration Cost of the Program)

### ① Builder Registration Fee

OHW charges the following fees for builder registration:

¥31,500 (incl. 5% consumption tax) for new registration;

¥26,250 (incl. 5% consumption tax) for renewal

When combined with the Completion Warranty Program for Houses, the fee is reduced to:

¥26,250 (incl. 5% consumption tax) for new registration;

¥21,000 (incl. 5% consumption tax) for renewal.

### ② House Registration Fee

The registration fee would be calculated based on the housing price and registration fee rates which depend on the above-mentioned courses. The following is a model for a detached house of ¥20 million value:

Standard Course: ¥20 million \* 0.5189% = ¥103,780 incl. 5% consumption tax;

Fund Course: ¥20 million \* 0.4384% = ¥87,680 incl. 5% consumption tax;

In the case of non-detached houses such as apartment houses, the calculation rates vary depending on the size, etc.

Detached Houses	Apartment building, etc
Housing price × 0.5189% or 0.4384%	Quantum + Apartment unit price × fee rates (%)

## **4-6-3-7. Achievement**

### **① Number of registered builders**

As at the end of April 2005, the number of registered builders in Japan is 40,894.

### **② Number of registered houses**

OHW is about to achieve the goal of registering one million houses by the end of April 2005, of which 965,307 will be detached houses and 39,874 will be apartment houses.

## **4-6-4. Other Warranty Programs of OHW**

### **4-6-4-1. Completion Warranty Program for Houses**

The Completion Warranty Program for Houses is a mechanism that allows an orderer to complete his/her house at minimal additional cost if the construction work has been suspended because of bankruptcy or other failure of contracted building suppliers who are categorized as a small or medium-sized entity. In such incidents, the warranty payment will be made by OHW based on the warranty contract. If requested by the orderer, OHW will also introduce an alternative builder or contractor to take over the work.

Users of this program are also eligible for early interim disbursement of the loans provided by the Government Housing Loan Corporation.

To maintain the steady development of this program, OHW has established the Fund for Completion Warranty in addition to using non-life insurance.

### **4-6-4-2. Warranty Program for Existing Houses**

This program was established for an existing house that has been traded. The major structural parts of the house will be covered for five years (2 years for parts relating to the waterproof performance) after passing on-site inspections based on the Inspection Standards. If a problem is found during the warranty period, OHW will pay most of the repair cost.

There is a one-stop service for applications to this program and to the Housing Performance Indication System based on the Housing (Quality Assurance) Act (Existing House Warranty along with Performance Evaluation).

To maintain the steady development of this program, OHW has established the Fund for Promotion of the Warranty Program for Used Houses in addition to using non-life insurance.

## 4-6-5. Summary

<b>Brief History</b>	
<b>Establishment of programs or organizations (background)</b>	<ul style="list-style-type: none"> <li>• On April 1, 1982 the Organization for Housing Warranty (OHW), initially known as the “Registration Organization for Warranted Houses”, was established to administer the Warranty Program for Houses.</li> </ul>
<b>Developments of the programs</b>	<ul style="list-style-type: none"> <li>• 1982 Registration Organization for Warranted Houses (ROWH) established as a non-profit organization</li> <li>• 1992 Warranty coverage expanded to apartment buildings</li> <li>• 1997 Warranty program expanded to apartment buildings for rent</li> <li>• 1999 Completion Warranty Program for Houses established</li> <li>• 2000 Programs extensively updated to reflect the introduction of the Housing Quality Assurance Act</li> <li>• 2001 Warranty Program for Existing Houses established</li> <li>• 2002 Warranty Program for Houses expanded to extension and alteration works above a certain size</li> </ul>
<b>Legal System of Home Warranty</b>	<ul style="list-style-type: none"> <li>• Civil Code = The responsibility is imposed on the act of not following the law. (Outrage responsibility.)</li> <li>• Housing Quality Assurance Act = The 10-year liability is based on this act</li> </ul>
<b>Home Warranty Providers in Japan</b>	
<b>Main Provider</b>	<ul style="list-style-type: none"> <li>• Organization for Housing Warranty (OHW)</li> </ul>
<b>Other Operators (providers)</b>	<ul style="list-style-type: none"> <li>• Japan Inspection Organization Corp.</li> <li>• Houseplus Corporation, Inc</li> <li>• Jutaku Anshin Hosho K.K.</li> <li>• Japan Federation of Architects &amp; Building</li> <li>• Japan ERI Company Limited</li> </ul>
<b>Warranty Program for Houses of OHW</b>	
<b>Registration of Builders</b>	<ul style="list-style-type: none"> <li>• Housing suppliers should be registered with OHW as registered builders to use the Warranty Program for Houses. Registration should be completed by simply submitting the application to OHW.</li> <li>• Registration validity term = 1 year</li> <li>• Registration cost = New ¥ 31500 and update ¥ 26250</li> </ul>
<b>Registration of Houses</b>	<ul style="list-style-type: none"> <li>• Houses Eligible for Registration Any type of newly-built house is eligible for application for registration.</li> <li>• Registration cost Detached Houses = Housing price × 0.5189% or 0.4384% Apartment building etc. = Quantum + Apartment unit price × fee rates (%)</li> </ul>
<b>Warranty Coverage (Long-term Warranty)</b>	<ul style="list-style-type: none"> <li>• 10 years</li> <li>• Major structural members and parts used to prevent rainwater leakage, as defined in the Housing Quality Assurance Act.</li> </ul>

<b>Warranty Coverage (Short-term Warranty)</b>	<ul style="list-style-type: none"> <li>• Detached Houses = 1 to 2 years</li> <li>• Apartment houses, etc. = 2 years</li> <li>• Peeling of finishing materials, deformation of fittings, leaks in bathrooms, and defective equipment.</li> </ul>
<b>Technical Requirements</b>	<ul style="list-style-type: none"> <li>• The OHW Design and Construction Standards and other relevant standards by a professional inspector.</li> </ul>
<b>Plan Check and Site Inspection</b>	<ul style="list-style-type: none"> <li>• Site inspections for detached houses:  First inspection: Following completion of the foundation structure  Second inspection: Following completion of the roof work</li> </ul>
<b>Insurance</b>	<ul style="list-style-type: none"> <li>• Insurance amount payable to a registered builder who carries out repair work shall be calculated as shown below.</li> <li>• Detached house  Insurance Amount = (Repair Cost - ¥ 100,000) × 80%</li> </ul>
<b>Dispute Settlement</b>	<ul style="list-style-type: none"> <li>• A defect of the house can be referred to the Technical Committee consisting of lawyers and construction specialists.</li> <li>• Conciliation fee of ¥52,500 incl. 5% consumption tax shall be charged.</li> </ul>
<b>Achievement (2005/04/31)</b>	<ul style="list-style-type: none"> <li>• The number of registered builders = 40,894</li> </ul>
	<ul style="list-style-type: none"> <li>• The number of registered houses = 1,005,181</li> </ul>

## 4-7. Netherlands

### 4-7-1. Introduction

Buying a newly developed residence can involve considerable risks. For example, the building contractor can go bankrupt during construction, which means construction will come to a standstill. Also, structural defects may appear in the residence after delivery.

The ordinary Dutch contractual liability arrangement between buyer and building contractor does not always offer buyers sufficient safeguards. In the Netherlands, the Stichting Garantie Instituut Woningbouw (*Guarantee Fund for Housing Development*) was founded in order to develop a solution to these problems.

### 4-7-2. History and objective of the GIW

The Stichting Garantie Instituut Woningbouw (GIW) was founded in 1974 and has its offices in Rotterdam. Following a two-year start-up period, the GIW became operational in 1976.

The objective of the GIW is to improve the quality of new owner-occupied residences in the Netherlands and to increase the level of trust between property developers and property buyers. Furthermore, the GIW provides safeguards and offers solutions in the event of problems.

Three groups are represented on the GIW board, namely:

- The public interest through the Vereniging van Nederlandse Gemeenten (*Association of Dutch Local Authorities*);
- Building contractors (through manufacturer organisations);
- Consumers (through the Consumentenbond (*Consumer Association*) and the Vereniging Eigen Huis (*Homeowner's Association*)).

The chairman of the board is independent. The GIW works with so-called affiliates in the implementation of the GIW scheme. These affiliates are:

- Bouwfonds Woningbouw B.V. (*Bouwfonds property developer*)
- Stichting Waarborgfonds Koopwoningen (SWK) (*Safeguard Fund for Owner-Occupied Residences*)
- Stichting Woningborg (*Residential Safeguard*)

These Affiliates assess building contractors in terms of financial resources and professional skills before these contractors can join the GIW. They also ensure that the financial risks involved in providing safeguards are covered.

It is therefore with good reason that building contractors that are members of the GIW – a total of roughly 1600 throughout the Netherlands – are called ‘quality contractors.’ These contractors guarantee that a residence meets certain structural conditions.

The GIW itself mainly deals with policy, rules and supervising the implementation of the GIW scheme by the affiliates and the implementation of the defect safeguard.

#### **(1) The national model contract and the GIW Guarantee and Safeguard scheme**

The GIW obliges its building contractor members to use a national model contract when they enter into an agreement/contract with buyers of new residences with a GIW guarantee. This model contract strikes a balance between the rights and obligations of the parties concerned. This

model contract also has its own liability arrangement.

The applicability of the GIW Guarantee and Safeguard scheme is included as a standard part of the model contract. This scheme was developed after careful consultation between all parties involved in the GIW (building contractors, consumers and the VNG (*Association of Dutch Local Authorities*)).

The GIW Guarantee and Safeguard scheme offers buyers of a new residence additional security in addition to the liability arrangement included in the national model contract.

The buyer of a new residence with a GIW guarantee receives the GIW guarantee and safeguard certificate from one of the Affiliates. People who qualify for this guarantee can use this certificate to appeal to the guarantees and safeguards in the GIW Guarantee and Safeguard scheme. The certificate is tied to an individual residence. Hence, a subsequent buyer can also appeal to the guarantees and safeguards from the GIW Guarantee and Safeguard scheme.

### **4-7-3. Guarantees and safeguards from the GIW Guarantee and Safeguard scheme**

The elements of the GIW Guarantee and Safeguard scheme are summarised below.

#### **1. Guarantee from the contractor**

In addition to his normal contractual and legal liability, the contractor gives the buyer an (extra) GIW guarantee, which implies that the residence will meet certain structural requirements on delivery.

#### **2. The insolvency safeguard from the GIW / affiliate**

If a contractor goes bankrupt during the construction of a residence, then the GIW (actually, the GIW affiliate on behalf of the GIW) guarantees the buyer that the residence will be completed at no additional cost in agreement with the applicable purchase/building contract, or that a compensation scheme will be implemented.

In practice, the construction will usually be completed through mediation of the relevant GIW Affiliate. At its own discretion, the Affiliate will compensate the buyer either on the basis of the additional amount paid to the completing contractor or on the basis of the instalments already paid. The compensation will be at most 17% of the agreed purchase/building price including the ground.

#### **3. The defect safeguard from the GIW / affiliate**

If, after delivery, a residence displays defects that represent a breach of the GIW guarantee and the contractor no longer exists or is insolvent, then the buyer can appeal to the GIW defect safeguard. In that case, the GIW (together with the affiliate) will ensure that the defect is repaired. Buyers can also appeal to this defect safeguard if the contractor remains in default after an arbitral judgement has been pronounced in which it is determined that the GIW guarantee has been breached. In that case, the objective is repair in kind.

As noted earlier, these safeguards are implemented at the expense and risk of the affiliates, who are also responsible for the risk cover of these safeguards. This process is supervised by the board of the GIW.



#### **4-7-4. The complaints procedure**

Any structural defects must be reported to the building contractor by the person who qualifies for the guarantee in writing and within the applicable guarantee period. The guarantee periods are described in the GIW Guarantee and Safeguard scheme. The following main rules apply:

- a general guarantee period of 6 years;
- a guarantee period of 10 years for serious structural defects that affect whether the residence is fit for habitation; and
- varying guarantee periods for specific parts of the residence, such as fittings and paintwork.

If the person who qualifies for the guarantee does not report the defects in writing and within the applicable guarantee period to the building contractor, then he is no longer entitled to his rights under the GIW Guarantee and Safeguard scheme.

After a written report of a complaint, the contractor must investigate the complaint and report within 4 weeks whether he will carry out repair work and if so, how and when.

The objective of all parties is to resolve disputes in amicable consultation. If this fails, then the relevant Affiliate can mediate, if required.

Should the dispute continue to exist despite mediation, then both buyer and building contractor can request independent arbitration from an arbitration body. This procedure should be fast, inexpensive and easily accessible. Representation of parties by a lawyer is not compulsory.

The buyer only pays a limited complaint fee of € 300 for the consideration of his dispute. The buyer's financial risks remain limited during the procedure. For example, a buyer can only be fined to pay costs to a limited extent.

The arbitrator will give his final verdict in a judgement. An appeal against this judgement is excluded by contract. So the parties are tied to the arbitrator's verdict.

#### **4-7-5. Appeal to the defect safeguard**

If the arbitrator decides in favour of the person who qualifies for the guarantee, then the arbitrator will sentence the building contractor to repair the defects in the residence within a certain period of time and/or to pay damages. If the building contractor does not implement the judgement, then the person who qualifies for the guarantee can request in writing that the GIW implement the judgement. Under penalty of the dissolution of his rights, a person who qualifies for the guarantee must submit this type of request within a year of an arbitral judgement.

In the case of a legitimate complaint, the GIW will ensure implementation of the arbitral judgement, but never for more than a sum of € 95,000 (as of 1 January 2003, followed by an annual indexed increase).

In the case of a dispute between the person who qualifies for the guarantee and the GIW on the implementation of the safeguard scheme, it will be settled by the government judge.

#### **4-7-6. Conclusion**

Given the above, we can conclude that the GIW guarantee provides buyers of a newly developed residence additional security and that it therefore has obvious added value compared to the underlying agreement. Therefore, it comes as no surprise that in the context of buyer protection,

many Dutch local authorities have made construction with a GIW guarantee compulsory.  
Rotterdam, October 2004

## **4-8. South Korea**

### **4-8-1. Housing Situation**

#### **(1) The Quantitative Status**

The Republic of Korea has suffered severe shortage of housing stock due to the rapid increase in population and high population density in big cities due to economic growth. To solve the shortage, the government launched a supply program for multiple-unit houses such as apartment complexes. Four hundred thousand units of housing have been supplied each year according to the 2 million units supply program of 1988. As a result, the housing supply ratio increased from 71.3% in 1985 to over 100% in 2002. However, the shortage problem is not solved yet since the housing supply ratio varies by region; 86.3% in Seoul, 93.9% in the capital region.

#### **(2) Quality of Dwellings**

The quality of housing was not good during the period of housing shortage since the priority of housing policy was placed upon quantity. Furthermore, it was difficult to expect quality improvement by the housing constructors since the sale price was controlled by the government. Defects were a common problem.

Due to the apartment culture developed in the big cities since the 1980s, most new housing units are equipped with modern facilities. According to the survey of population and housing, the average size of a home rose 170% from 47.7 m<sup>2</sup> in 1975 to 82.8 m<sup>2</sup> in 1995, and the dwelling area per person doubled from 8.2 m<sup>2</sup> in 1975 to 17.2 m<sup>2</sup> in 1995. In addition, conveniences such as bathing facilities, toilet facilities, and kitchens, have been improved to a considerable extent, and also the degree of improvement is rising appreciably.

In 1998 the price control was abolished and the housing constructors could set the sale price for a proper profit. While the housing supply ratio increased, the housing market transformed to become consumer-oriented and the quality of housing has been enhanced.

Recently, gentrification and various concept houses such as wellbeing and intelligent houses with IT systems have been developed due to the intensive quality competition among housing constructors.

#### **(3) Recent Status of Housing Market**

The rapid economic growth has brought a rise in housing and land prices, and housing has been the investment asset for wealth. The housing price decreased sharply after the foreign currency crisis in 1997. The economy recovered after the crisis ended in 1999 and the housing price rose dramatically in 2002 and 2003. The most outstanding characteristic of the housing market in the 2000s is the big difference in housing price increases by region and the marked rise of price of high quality houses. In addition, the housing price in reconstructed complexes showed a steep rise due to the expectation of high profit (capital gain).

The government launched a policy mix of transaction control and a stronger tax system for stabilizing the housing price. In response, the price was stabilized from the end of 2003.

### **4-8-2. New Home Warranty Program**

#### **(1) History**

Since the 1960s Korea has seen unprecedented economic growth accelerated by rapid industrialization and urbanization, and the growth of the nuclear family. Moreover, the sustained

migration of people to the large cities has led not only to an acute housing shortage, but also a rapid increase in the price of housing.

In 1977, the government adopted the Housing Construction Promotion Law. This has led to the implementation of various housing-related policies. Accordingly, the pre-construction sales system was adopted so that the builder can obtain the necessary construction funds.

In the 1990s, 500,000 to 600,000 dwellings were produced. This placed an increasing burden on the housing builders for acquiring funds, hence increasing the possibilities of insolvency. The housing guarantee system was established precisely to prevent bankruptcies for these housing builders.

Potential homeowners must be protected in order to guarantee a stable and efficient supply of homes.

1992	<ul style="list-style-type: none"> <li>Official announcement of the Korea Housing Financial Law (Source: Revised Korea Housing Construction Promotion Law)</li> </ul>
1993	<ul style="list-style-type: none"> <li>Established and registered the Housing</li> <li>Began operations - 14 types of guarantees and loans including housing completion guarantees</li> </ul>
1999	<ul style="list-style-type: none"> <li>Official announcement of the Korea Housing Guarantee Company Act (Source: Revised Korea Housing Construction Promotion Law)</li> <li>Established and registered the Korean Housing Guarantee Co. Ltd.</li> </ul>
2003	<ul style="list-style-type: none"> <li>Introduction of three new guarantee products, including guarantees for the completion of multipurpose buildings for residences and businesses</li> </ul>

## (2) Home Warranty Main Providers

Korea Housing Guarantee Co. Ltd. (KHGC)

Korea Housing Guarantee Co. Ltd. (KHGC) is a government-invested organization, which was originally established as the Korea Housing Financial Co-operative (KHFC) in April 1993 and then restarted in June 1999 through joint investments by the government, financial institutions, and housing business entities.

The company has been established with a view to contributing to the improvement of national prosperity and the balanced development of the national economy. To this end, it aims to protect potential homeowners and occupants through all types of housing construction-related guarantees and to promote housing construction by supporting smooth business performance by housing construction contractors.

## 4-8-3. Warranty Program for Houses

### (1) Guarantees for repair compensation

KHGC guarantees the entire housing industry process from sale, leasing, supervision, licenses and permits, to compensation for the repair of apartments, houses and multi-purpose buildings.

This product guarantees the execution of repairs when any defects are found within the mandatory period (between the housing inspection and the expiration of an obligatory period for repairs).

**Guarantees for supervision deposits**

We provide guarantees for the payment of supervision fees that housing builders must pay in relation to the supervision of housing construction businesses.

**(2) Credit Ratings**

Credit ratings aim to evaluate the financial condition and management capabilities of housing builders and to objectively lay down terms and conditions of business according to these results.

KHGC has jointly developed state-of-the-art credit rating systems with professional agencies. We utilize evaluative indicators and methods that can best reflect the characteristics of individual housing builders. These credit ratings are classified into nine grades in accordance with standard credit evaluation models and bankruptcy prediction models. We conduct credit ratings on an annual basis to issue letters of guarantee.

**(3) Guarantee Fee Rate Table by Credit Rating**

Credit ratings are essential for the operation of housing businesses and the improvement of reliability. KHGC ensures fair and accurate evaluations backed by objective and scientific systems.

(unit: %, p.a.)

Guarantee Type \ Credit Rating	A <sup>+</sup>	A	B <sup>+</sup>	B	C <sup>+</sup>	C	D <sup>+</sup>	D	E
Guarantees for Repair Compensation	0.24%	0.24%	0.27%	0.29%	0.29%	0.29%	0.40%	0.44%	0.44%

※Rates for housing completion guarantees are the same as those for multipurpose buildings for residences and businesses, and as rental dwellings guarantees.

Source: Korea Housing Guarantee Co. Ltd. Home Page

## 4-9. Sweden

### 4-9-1. Housing Situation in Sweden

Considering its 8.9 million inhabitants, Sweden has had a somewhat limited new home construction over the last ten years, in relation to the demand. However, since year 2000 construction has increased, and 17,200 new housing units were newly constructed. For 2001 the number of new dwellings under way is expected to exceed 20,000.

The new housing market is dominated by four large public companies that produce housing across the country. These companies and many others strive for improved quality. In most cases this assurance of quality permeates every phase of housing production, which leads to a reduction in the occurrence of flaws or damage.

### 4-9-2. History

Currently there are two major home warranty providers in Sweden which are Bostadsgaranti Insurance Co. and GARBO Insurance Co.

In 1962 AB Bostadsgaranti was established with intent to provide warranty for apartment houses built for Housing Cooperatives which was funded by the building industry.

In October 1976 based on the agreement (called Smahus 76) between SBEF (The Associated General contractors and House Builders of Sweden) and SVF (The Association of Swedish Home-Owners) the new scheme was established in order to promote consumer protection. Under this scheme AB Bostadsgaranti became the first organization offering 10-year warranties to buyers of new homes in Sweden. There were three major contents in the scheme:

- (1) Setting up General Conditions of Contract to be signed between a builder and a home owner;
- (2) Completion Guarantee by a warranty company;
- (3) Commitment in regard to a long-term warranty

#### **(1) General Conditions of Contract**

This is a revised version of AB72 (later revised as ABS95) which stipulates standard conditions upon exchanging contract agreement. The followings are the points of note:

- a. The site inspections should be carried out under a house owner's responsibility;
- b. A defect found within two years since the final inspection should be put right by the builder (defects liability period);
- c. If the defect is due to the architect's negligence, the builder has a right to claim for indemnity. In case of a design-build contract, the builder is liable in contract also for defects due to the architect's negligence.

#### **(2) Completion Guarantee by AB Bostadsgaranti**

AB Bostadsgaranti insured that the builder would carry out the performance guarantee. If the builder became bankrupt or insolvent during the two-year defects liability period, AB Bostadsgaranti would take over the repair work for the defect reported.

#### **(3) Commitment in regard to a long-term warranty**

It covered serious damage caused by defects occurred after the two-year defects liability

period up to the end of the 10<sup>th</sup> year from the completion of the house. This warranty was provided to consumers by AB Bostadsgaranti. AB Bostadsgaranti should take out insurance to diverse risks. Skandia and Trygg-Hansa underwritten insurance.

Conflicts over the liability issue were handed to Committee of Small Dwelling Guarantee. If the arbitration did not work, the issue was brought to intermediation process.

There are two acts enforced with the aim of consumer protection for new construction of homes. Those are Consumer Services Act and Building Defects Insurance Act. In Sweden it is required by law that all housing that is constructed for permanent residence must have Building Defects Insurance which are offered by Bostadsgaranti Insurance Co. and GAR-BO Insurance Co.

### **4-9-3. AB Bostadsgaranti**

Since 1984 AB Bostadsgaranti has been owned 50/50 basis by the Central Government and Swedish Construction Federation. In the year 2000 a wholly owned subsidiary, Bostadsgaranti Insurance Co. was formed which are now offering insurance covering 10-year warranty which consists of Completion Warranty Insurance and Building Defects Insurance. while the parent company provides warranties covering Deposits and Advance Payments in the context of apartments in tenant-owner societies.

#### **4-9-3-1. Warranty Schemes**

##### **(1) Building Defects Insurance (offered by Bostadsgaranti Insurance Co.)**

Building Defects Insurance will indemnify reasonable costs within the Sum Insured, to remedy:

- Fault in the construction of the building
- Fault in the material which has been used in the construction
- Fault in the construction workmanship
- Damage to the property insured caused by such faults

Those faults and damages should be the ones that are discovered and reported within 10 years from the date of the certificate of completion.

Building Defects Insurance can also apply to repairs, renovations and additions, however the insurance applies to only the contract works on the building.

Building Defects Insurance can be taken out for multiple resident buildings as well as for small houses, either directly by the owner or by the entrepreneur that performs the construction. The Building Defects Insurance remain with the home when it changes hands.

##### **(2) Completion Warranty Insurance (offered by Bostadsgaranti Insurance Co.)**

Should the building company become insolvent during the construction period, the Completion Warranty Insurance ensures that the house or the remedy work is completed. There is one ①Completion Warranty Policy during the Contract Period, and ②another during the Defects Liability Period. The former is to ensure completion of the works written in the contract agreement, and the latter is to ensure that defects becoming

manifest during the Defect Liability Period are remedied. Aggregate Limit will normally be 10% of the contract price①, and for the Defect Liability Period ② 5 or 10% of the contract price.

### **(3) Deposit Guarantee (offered by Bostadsgaranti Ltd.)**

The parent company, AB Bostadsgaranti Ltd. issues Deposit Guarantee in association with the construction of homes that are intended to form tenant-owner's societies. The contractor building or transforming premises intended for a tenant-owner society can take out the policy. Deposit Guarantee is a security for deposits and that are paid to the tenant-owner's societies. The premium is paid once and for all.

### **(4) Advance Payment Guarantee**

Advance Payment Guarantee protects a party who has made an advance payment for the enjoyment of an apartment in a tenant-owner society; future tenant-owners are sometimes required to make advance payment upon exchanging a so-called preliminary agreement with the society. The contractor building or transforming premises for a tenant-owner society can take out this guarantee.

\*\* Deposit is the money the buyer of the housing cooperatives pays after the project started up. All deposits together constitutes a part of the financing of the project. Advance payment is a part (usually 10% or more) of the Deposit that can be taken out from the buyer by the tenant-owner society at an early stage, before the budget for the project is finally settled and the conclusive selling document is signed.

## **4-9-3-2. Registration of Builders**

Builders who wish to take out Bostadsgaranti Insurance Co.'s warranty have to go through scrutiny which includes the builder's financial status and his business history. Bostadsgaranti Insurance Co. supervises the builders' deeds continuously and conducts a thorough check when the builder launches a new housing project.

## **4-9-3-3. Dispute**

Disputes arising out of the above warranties shall be dealt

- (1) if the Insured is a legal person, it will be settled in accordance with Swedish legislation and by an arbitration conducted by Bostadsgaranti Insurance Co.
- (2) if the Insured is a natural person, it will be settled in accordance with Swedish legislation and by a general court in Sweden.

## **4-9-3-4. The Warranty Fee and Deductible**

The warranty fee for a home varies largely according to the solvency rating of the builder and the construction cost. As of 2004 the average fee for a detached house with construction cost SEK 2.300.000 (approximately 303,000 US dollars) is SEK 16.100 Kroner (2123 US dollars) which is 0.7% of the construction cost.

The owner of the building has to pay the deductible which is index-based and decided in accordance with the law "The Law of General Insurance".

As of 2004 it is SEK 19.650. The total undertaking per home is limited to the purchase sum



(exclusive of cost of site).

#### **4-9-4. GAR-BO AB**

GAR-BO AB was established in 1988 funded by some 50 companies specifying construction of wooden houses. The GAR-BO AB's warranties are backed up by LFAB Insurance Company. These warranties were also applied when houses are exported to UK or Germany.

##### **4-9-4-1. Warranties**

The warranties, today offered by GAR-BO Insurance Co., consist of Completion Warranty and Building Defects Insurance. The former is taken out by a builder to assure completion of the construction work. If the builder fails to the obligation, GAR-BO AB will take over the builder's responsibility.

The Building Defects Insurance follows the Building Defects Insurance Act and give approximately the same cover as the Building Defects Insurance provided by Bostadsgaranti Insurance Co.

The builder should pay the warranty fees and defines the warranty coverage in the contract.

## **4-10. United Kingdom**

### **4-10-1. Setting UK standards**

NHBC is the standard setting body and leading warranty and insurance provider for new homes and newly converted homes in the UK. NHBC was established over 65 years ago as a non-profit distributing company, and its primary purpose is to help raise standards in the new house-building industry and provide consumer protection.

Providing risk management services to the house-building and wider construction industry, NHBC has approximately 18,000 registered builders who agree to comply with NHBC Rules and Standards. Around 170,000 new homes are registered for Buildmark warranty cover each year and the Buildmark covers more than 85% of new homes in the UK. To date, NHBC has protected over 30% of existing homes in the UK.

### **4-10-2. Establishment of NHBC**

NHBC was started in 1936 by professional bodies and interested parties in the house-building industry with the object of giving homeowners a fair deal at a time when poor building standards was a matter of national concern.

At its formation in 1936, NHBC's objective was to *“encourage and promote a high standard of design, workmanship and materials in house building in the United Kingdom.”* This was to be achieved by establishing a register of qualified house-builders who built to a set of minimum standards.

In 1967, NHBC extended its role by offering consumer protection to homebuyers through the introduction of a 10-year warranty and insurance policy called the Buildmark. The Buildmark policy had two parts. For the first two years NHBC offered a warranty to underwrite the builder's liability to repair any defects in the property. NHBC would act as a 'mediator' investigating whether any defect was a breach of its Technical Standards and instruct the builder to carry out repairs. If this did not happen, NHBC could intervene to ensure the work was carried out.

The second part of the Buildmark cover was an insurance policy in years 3-10 for the main structure of the home.

With the introduction of Buildmark, NHBC's business model was firmly established. NHBC would raise standards in house building by setting standards for construction, inspecting during construction to monitor compliance and providing reassurance to new home buyers through the 10-year Buildmark policy. Successive increases in the level of cover or additions and improvements to the Standards would raise the level of builder performance and the quality of new homes.

Whilst in the UK there is no statutory requirement for builders to offer warranties on new homes, warranties became almost mandatory in 1968 when mortgage-lenders in the UK agreed that no mortgage advances (i.e. loans to purchase a home) would be made on newly built homes without a certificate from NHBC. The commercial necessity for builders to provide a warranty was therefore clear, and NHBC's role in certifying new homes established.

In 1985, NHBC's role was broadened when Government authorised it to carry out Building Control inspections in competition with local authorities. House builders then could choose to

use either NHBC or the Local Authority to check that the home complied with statutory Building Regulations.

In the late 1980s, NHBC's position as the only supplier of new home warranties changed when an existing company 'Municipal Mutual Insurance' offered an alternative warranty to NHBC. When a few years later this company ceased to operate, its business passed to Zurich Building Guarantees. Today Zurich and two other providers have approximately 10 -15% share of the market.

In 1997, a new Government was elected that sought to increase consumer protection for homeowners. NHBC worked closely with Government to reform its governance and improve the level of cover offered. A Consumer Committee was established to champion homeowners' perspective within the company, and the NHBC Council and Board was re-structured to ensure that the interests of homeowners, builders, lenders and professional bodies was balanced. NHBC was therefore firmly independent of both Government and the house builders, with a mission to work with all stakeholders to build a community of interest to raise the standards of new homes.

### **4-10-3. NHBC Today**

#### **A Stakeholder Company**

NHBC is a non-profit distributing company independent of both Government and house builders. Its governing Council includes a wide-range of stakeholders with an interest in raising house-building standards. It includes mortgage lenders, the Local Government Association, consumer organisations, the Law Society, architects, builders and surveyors.

#### **How NHBC Raises Standards**

NHBC sets, monitors and maintains construction standards. It registers builders, inspects their work at key stages of the construction process, and through expert risk assessment reduces the number of defects in new homes. To protect homeowners if a problem does occur, NHBC provides the 10-year Buildmark warranty and insurance cover.

#### **Technical Standards**

NHBC's Technical Standards lie at the heart of its aim to help raise the quality of new homes. They set the standard to which new homes are built and provide invaluable advice and assistance to house builders. The Standards are up-dated each year and new chapters are added to reflect changes in the construction process.

#### **Registration**

NHBC has approximately 18,000 house builders and developers on its register. All new applicant builders are put through a technical and financial vetting system. Once accepted on to the register, the builder must comply with NHBC Rules and build to their Technical Standards. NHBC registered builders build around 85% of the new homes built in the UK every year.

#### **Inspection**

NHBC carries out inspection at key stages of construction of a new home. There are a minimum of four key stage inspection visits which take place: during the excavation of foundations, before plastering, when the superstructure is built and before the hand over of the property to the homeowner. NHBC's 330 inspectors carry out almost one million inspections each year and use world-leading technology to gather vital data and management information to help builders raise standards. By inspecting every home at 4 key stages of construction, NHBC seeks to minimise defects and manages risk for the offering the Buildmark warranty and insurance policy.

Where NHBC also carries out Building Control inspections, an additional inspection is carried out. NHBC is now the largest single provider of Building Control with over 50% of the market in England and Wales.

### **Warranty and Insurance**

NHBC's 10-year warranty and insurance cover for newly built or newly converted residential housing is called *Buildmark*. NHBC's 10-year Buildmark Cover currently protects around 1.6 million homes in the UK. In addition to this core product NHBC also offers *Buildmark Choice* for social housing and *Solo* for self-built homes (where homeowners buy land and build the home themselves.)

NHBC registered builders apply for Buildmark when they register their residential building plots with NHBC. The builder pays the premium directly to NHBC and this is based on a scale of charges relating to the sales value of each home.

The builder includes the Buildmark warranty and insurance cover when selling newly-built or newly-converted residential homes to homebuyers because the cost is included in the purchase price of the new home.

*Buildmark is divided into four main parts:*

#### **Section 1 – During Construction**

Before a newly built home is completed - If, due to insolvency or fraud, the builder does not start building or converting a home or fails to finish it, NHBC will reimburse money the homebuyer has paid the builder for the home where the money cannot be recovered from him.

If the property is not finished, NHBC can arrange for the property to be finished in accordance with NHBC Technical Standards. There is a financial limit of £100,000 or 10% of the original purchase price (whichever is the less) to this part of the cover.

#### **Section 2 – Years 1 and 2**

For the first two years after the house is complete, the builder is responsible for rectifying defects or damage in the home which do not comply with NHBC's Technical Standards. If the homeowner discovers any defects or damage, they must report these to the builder in writing. If a homeowner and builder do not agree on what repair work is required, NHBC can offer its free independent Resolution Service. This involves NHBC carrying out an investigation of the problems and instructing the builder to carry out repair works where necessary.

If the builder does not agree to remedy these defects, NHBC will intervene and undertake the work itself. Effectively in years one and two NHBC acts as a mediator in disputes between the homeowner and builder and ensures that the builders honour their liabilities in terms of NHBC's Rules and Standards.

#### **Section 3 – NHBC Insurance Years 3-10**

For the remaining eight years of the Buildmark policy, NHBC's insurance protects the homes for damage costing more than £640 to put right which is caused by work that does not comply with NHBC's Technical Standards. This part of the Buildmark covers many items relating to the structure of the home, including items such as double-glazing, staircases and wet-applied wall plaster.

#### **Section 4 – NHBC Insurance for Building Control**

This insurance covers the period of 10 years and only applies if NHBC has carried out the statutory Building Control. It covers homeowners against costs arising from the builder's failure to comply with specified statutory Building Regulations. NHBC will pay the cost of putting

right any of the work specified in the Final Certificate that does not comply with the Specified Regulations.

#### **4-10-4. Other NHBC Services**

NHBC also provides a range of Services, including technical information, training, health and safety, engineering and energy rating services.

##### **Health and Safety**

NHBC is the UK's leading provider of health and safety services to the house-building industry. It provides site inspections, health and safety audits, accident investigation, and planning supervision.

##### **Training**

NHBC is the largest provider of construction management training in the UK. It provides a wide range of training and qualification programs, seminars and on-site training, designed specifically for builders and developers.

##### **Energy and Environment Services**

NHBC provides energy ratings - a technical assessment of the energy efficiency of new homes, required by Building Regulations. We also have licensed assessors who conduct EcoHomes assessments, examining the environmental impact of new developments.

##### **Information Services**

NHBC provides management information to major house-builders on a quarterly basis in the form of Builder Reports. These contain all the crucial data to allow builders to benchmark their performance against their competitors and between the sites and regions within their companies. Data regarding types of defects and customer satisfaction levels is provided to allow builders to monitor and improve their performance.

##### **Praising Best Practice**

NHBC's annual Pride in the Job Awards celebrates the achievements of site managers across the UK. Around 18,000 managers from sites across the UK compete for the Supreme Award each year. By 'praising the best and encouraging the rest,' NHBC makes an important contribution to improving the quality of new homes.

#### **4-10-5. Other UK Warranty Providers**

##### *Zurich Insurance Building Guarantees*

Zurich Insurance Building Guarantees has a ten year latent defects warranty. It covers newly built homes for sale or rent by the private or social housing sector, and also covers conversions.

Where elements of the home are factory built, a manufacturers warranty is available. For the first two years, either the developer or manufacturer are responsible for rectifying damage or major damage caused by defects that do not meet Zurich's published technical requirements. If they do not deal with them, Zurich will act for the policy holder and arrange for remedial action themselves. The remainder of the 10 years is insured by Zurich.

The policy provides a range of options to widen the cover and the warranty can be extended by five years at the end of the 10 year term, subject to claims experience and the payment of an additional premium. Warranty cover can also be provided for self builders and commercial buildings.

**Premier**

Premier Guarantee was established in 1996 and gained accreditation to offer warranties in 2001. It operates in the Republic of Ireland and in the UK.

Premier's 10 year warranty provides structural defect cover for full costs of repairs to any one house up to €200,000 in respect of residential houses, and €2,000,000 in respect of apartment buildings index linked.

Premier has recently also launched a new version of its warranty scheme called 'Hallmark', in partnership with local authorities.

## 4-11. United States

### 4-11-1. Background and History in the US

Since 1950s, “Principle of Implied Guarantee for Inhabitability” has come to a recognition of the public. It means that houses are required to have been built with relevant technical standards and to be suitable for habitation without a written document. In early 1970s, the Federal Government was considering to set up some legal framework in regard to housing supply to correspond to the consumer-protection movement.

**NAHB (National Association of Home Builders of the United States)** was offended by this Government’s move as the biggest home builders’ association in the US. In 1972 the Federal Government and NAHB sent a research group to NHBC (National Association of Home Builders) in U.K. to find the solution. Based on this research NAHB quickly developed **Home Owners Warranty Program** in 1973 in order to avoid the Government’s intervention and established **Home Owners Warranty Corporation (HOW)** to operate the system as its 100% subsidiary. This practically blocked the enforcement of the legislative measures, and in 1977 the bill to establish Office of Consumer Representation was rejected at the Congress.

However, in 1994 HOW was forced to cease the warranty business because of excess of debt. (details will be described later).

In 1980s several private home warranty programs came into the market. Currently several private organizations offer warranty programs. **HBW** is the biggest provider in the U.S. in number of warranted houses founded in 1980. **RWC** has the second biggest share, and **QBW** is the third.

**HBW (Home Buyers Warranty)**

**RWC (Residential Warranty Insurance Corporation)**

**QBW (Quality Builder’s Warranty Company)**

**PWC (Professional Warranty Corporation)**

**The U.S. Department of Housing and Urban Development (HUD)** approves 10-year warranty programs based on the guidelines HUD developed.

There has been a movement to set a Uniform Warranty due to the fact that the findings of some research revealed that effectiveness of the third party home warranty programs approved by HUD was often diminished by variations in the coverage afforded and by shortcomings in the dispute resolution process. However HUD has not approved the implementation of the Uniform Warranty.

### 4-11-2. Bankruptcy of HOW

#### (1) History

In 1993 just before being forced to bankruptcy, HOW was said to have more than 7,000 registered builders and more than 1.7 million houses under its coverage which occupied the half of the home warranty market nationwide.

In 1994 the State Insurance Bureau carried out the audit and found out that HOW had capital deficit of 4,740 dollars. Though the Bureau issued orders to accumulate the reserve and other fund within 90 days, HOW did not follow this order, and the Bureau decided to order the suspension of the business.

Since HOW was not considered as an insurance company, there was no relief applied by the State Fund.

Currently HOW offers the warranty service for used houses, and only in the State of New Jersey it continues the warranty business

## **(2) Cause**

According to a professional of NHBC, the HOW system had a high risk of accidents. However the management people of HOW insist that the decision of the State Insurance Bureau was the mistake.

There is no definite cause identified, however the reasons of bankruptcy are assumed as follows:

- (1) According to NHBC, the direct cause was an extreme amount of insurance payment happened at housing development in New Mexico because of uneven soil.
- (2) The number of accidents involving the payment of insurance money had increased, however HOW could not raise the premium since the competition between the warranty providers had intensified.
- (3) Low level of risk management: 1) Under the HOW system HOW did not carry out inspection on its own and depended on the inspection results by municipality; 2) HOW did not have its own technical standards and borrowed the industry standard; 3) Since the claim was made directly to the insurance company (later recourse to OHW), the builder or developer of interest did not deal with the matter.

## **4-11-3. HBW**

### **(1) General Description**

HBW was established in 1980, and now it has grown to a nationwide warranty provider with 15,000 registered builders in 48 States and more than 1.1 million new and pre-owned homes under warranty.

HBW has warranty programs for extended or reconstructed houses, existing houses and condominiums in addition to newly built houses.

When the builder launches a housing development project, he is obliged to go through certain procedures set by HBW at the nearby HBW office. HBW backs up the builder in the marketing aspect such as providing various handouts for purchasers such as the ones to explain the contents of the warranty and to instruct how to maintain the house.

### **(2) Builder Registration**

A builder (developer) should apply for registration as a company not as an individual at the local HBW branch where its business size, past achievements, claim history, technical level, financial status and the President's business achievements and such are considered. The second stage of screening is to see the financial credit of the applicant.

HBW could require security deposit or letter of credit from the financial institution. Once a builder is accepted as a member of HBW, he should agree to follow the rules set by HBW and exchange agreement with both HBW and NHIC.

The membership is good for one year. Renewal procedure is the same as the first-time application. If the registered builder violated the HBW rules or financially became unhealthy,



the registration would be eliminated.

As of 1997 the initial registration fee is 300 dollars and 295 dollars upon renewal.

### **(3) Coverage**

There are two programs: short-term warranty program and long-term warranty program, which a builder has a choice to take out both or one out of two. 20% of the builders take out only long-term warranty program. Both warranties will be carried over to the succeeding owner if the ownership is changed.

#### 1). Short-term Warranty

There are 2 year coverage and 1 year coverage: Two-year coverage against defects in electricity, piping and ductwork and mechanical systems; and one-year coverage against defects in other non-structural parts. In case where the builder neglected to perform his warranty obligation and no settlement were reached through conciliation or arbitration, HBW would pay the repair cost or carry out the repair work instead of the builder. The definition of "Defect" covered under the short-term warranty is specified in Construction Quality Standard developed by HBW.

#### 2). Long-term Warranty

The long-term warranty program offers the major structural defect coverage for 10 years. The defect subject to this warranty coverage is the one which makes the house unsafe or unsanitary or unlivable.

When a claim is made, the registered builder is obliged to carry out investigation and make an appraisal in regard to the required repair work as well as its cost. If the builder did not carry out the investigation, HBW will pay 250 dollars to the owner as the appraisal fee.

If the defect occurred because of uneven ground or bad soil owing to force majeure, the builder would be indemnified.

### **(4) Insurance Back-up**

HBW has strong financial backing from National Home Insurance Company (RRG), Residential Insurance Company (RRG), Swiss Re, an international insurance company, Quanta and Toa Re America.

### **(5) Quality Control**

Under the HBW scheme there are three measures to keep and maintain the quality of houses.

#### 1). Building Control by municipalities followed by HBW inspections

Municipalities carry out the building control which includes in-depth checking and site inspections. HBW first evaluates the results of those checks carried out by the municipality and sends out its own inspectors when considered necessary. The site inspections are carried out in three phases: 1) when foundation work is finished-- before pouring concrete; 2) when structural work is completed—before the interior work starts; 3) when completed.

As of 1997 HBW has more than 700 employees nationwide, 10 risk management experts and 1,050 contracted inspectors all of those are licensed Building Code Inspector. There are also 12 HBW employees who supervise those contracted inspectors by auditing or carrying out

spot checking.

## 2). Quality Control by HBW

“Construction Quality Standard” contains definitions of the “defects” which are described in a numerical manner. This will give the explicit understanding to the owner in regard to the quality of the house in addition to indicating the target in regard to quality control for the builder.

## 3). HBW also has Risk Management Manual in order to prevent defects.

Particularly in regard to ground (soil) and foundation work, the manual has in-depth instructions for builders such as how to avoid land subsidence as well as the guidelines to conduct inspections

## **(6) Insurance Payment**

Insurance money is paid when the builder does not perform his obligation under the short-term warranty or when the event covered under long-term warranty happens.

For the first case, 250 dollars of deductible per defect will be charged. For the latter case, there is no deductible set, though the maximum amount of payment should not be more than the original price of the house.

The insurance amount (repair cost) under the long-term warranty includes the repair cost to put right the structural durability/strength as well as the loss concomitantly occurred in other parts because of the defect in the structural parts. Quality of the repair works are limited to the ones to recover the original level of safety, hygiene and livability including the related finishing work. The insurance payment will be decided based on the report prepared by the registered builder. The insurance company first verifies and obtains the owner’s consent in regard to the contents of the report. If there is a dispute between the parties concerned, HBW would send the third-party professional inspector and carry out investigation and appraisal.

NHIC obtains a subrogated right of claim for indemnity for the insurance amount paid. NHIC has reinsurance contracts with several insurance companies.

## **(7) Conciliation and Arbitration**

Any dispute will be referred to HBW arbitration procedure. If there is no settlement reached, AAA (American Arbitration Association) or other professional arbitration organization which the parties concerned agree on leaving the case will take over. Settlement should be concluded within 40 days after the application is submitted.

### **[Premiums]**

There is a premium rate book by the area. The premium differs by the size of the project, history of the registered builder and if the house is low-rise or high-rise. The premium of high-rise houses is twice as expensive compared to low-rise houses, and the premium in the area where the condition of the grounds are at risk.

If the builder takes out only long-term warranty, the premium is 70% compared to take out both long-term and short-term warranties. The lowest premium is 0.15% of the price of the house, and the highest is 1.0%.

#### **4-11-4. Warranty Programs for Existing Houses and Extended or Reconstructed Houses**

Several companies offer warranty programs for existing houses. The major ones are HBRWC (Home Buyers Resale Warranty Corporation) which is a subsidiary of HBW, UOHPC (United One Home Protection Corporation) and NHWA (National Home Warranty Association) which is the nationwide builders association.

This program is applied by either the buyer or the seller of the house via realtor.

As of 1995 the number of houses under any of those warranty programs for existing houses or remodeled houses is over 800,000.

There is no insurance back-up for these programs.

##### **[Contents of the warranty]**

There is not much difference among those programs, which give one-year warranty after the certain inspection process for heating/air conditioning system, kitchen appliances, pipes, garage door. Those programs do not cover any part of the building itself. The coverage can be extended by an extra premium.

##### **[Costs]**

The premium is between 350 dollars to 450 dollars.

The repair cost is decided by the negotiation between warranty provider, the insured and the builder who did the repairing work. The deductible is 50 to 100 dollars. Sometimes there is a limited amount set.

##### **[Merit]**

It is said that the price of the warranted houses is 2.4% higher in average and the time to be sold is 27 days shorter in average compared to the houses with no warranty.