THE SENTENCE COUNTED AS LAW (SCL)
ABOUT OBLIGED EARTHQUAKE INSURANCE (OEI)

(tentative translation)

Regulating The OEI is sentenced in 25.11.1999 by Counc?l of Ministers with an authority given by law no. 4452 (changed with 4484)

Aim:
Article 1: The aim of this SCL is to make out principals and methods about making earthquake insurance for compensating the material harms that building owners or owners of usufructs dispose when the earthquake occurs.

Containing:
Article 2: The unattached sections that contained by the law no.634 (Flat owning law), the buildings that constructed as dwelling, on the real estate that registered to the land registration and belong to the special possession and the bureaus, offices and unattached sections that used for similar aims atwhich these buildings and dwellings that constructed by the government due to the catastrophes or dwellings that built with credit are contained by OEI. Otherhand, the buildings belong to the government and built onto the village common areas are not.

Definitions:
Article 3: In this SCL;
a) Minister or Ministry: Means The Minister or Ministry that the Undersecretary of Treasury contained by,
b) Undersecretary: The Undersecretary of Treasury,
c) Institute: Natural Catastrophe Insurances Institute,
d) Council: Natural Catastrophe Insurances Institute Board,
e) Obliged Earthquake Insurance: The necessary insurance that assures the material loses due to the earthquake, according to the article 10.

Natural Catastrophe Insurances Institute (N.C.I.I.)
Article 4: NCII is founded with Public Juristic ?dentity in order to make insurance and to fulfill other missions that given itself by this SCL in the court of Ministry.

The institute is not contained the law no.1050 (General Accounting), 3346, 832, 2886 and 6245. The institute's premium claims are collected according to the law no 6183. The institute's yearly counts, operations and expenses are inspected by Undersecretary.

Exemption From Taxes:
Article 5: The institute and it's incomes are free from all the taxes.

Management Of The Institute:
Article 6: The institute run by ″Natural Catastrophe Insurances Institute Board″ which has totally 7 members whom one of them is president. Institute's technical business are given to an insurance or reassurance firm by the Undersecretary with a contract to run with name of ″The Institute Administrator″
This contract is made for maximum 5 years and can be renewed in the same procedure.

Natural Catastrophe Insurances Institute Board:
Article 7: Board members are:
a) a member who representates the Prime Ministry, determined by the Prime Ministry Undersecretary and at least graded general manager,
b) a member who representates the Undersecretary, from Insurancy General Management
at least graded deputy general manager,
c) a member who representates the Ministry of Cultivating and settling, experienced in natural catastrophes at least graded deputy general manager,
d) a member who representates The Council of Capital Market, experienced in fund management, at least graded office director.
e) a member who representates The Turkey Insurance and Reassurance Companies Association, experienced at least 7 years in insurance and reassurance,
f) a member who will be determined by Undersecretary, experienced at least 7 years in earthquake, graduated the engineering faculty of geophysics, construction, geology or equalled other sections,
g) a member who representates the institute president, at least graded deputy general manager.

The members are appointed by Minister with the Undersecretary's propose. Minister entrusts a member as president. The members do their missions for five years and could be appointed maximum twice.

If the members resign from their own institutes, membership comes to end. In these cases a new member is appointed in two months by the institute which connected with the resigned member. The new member completes the former's time.

The members should be have the features that defined inwhich the law no:657's article 48 lower article 1.4.5.6.7.

The board meets with at least five members and gets decisions with at least four member's decision in the same direction.

The President representates the board. The institute administrator fulfills the board decisions. The president and the members are get paid as much as Public Economic Enterprise Board president and members.

The Missions Of The Board:
Article 8: The missions of the board are;
a) To decide the policies about the institutes work and make work plan.
b) To determine the principals of work of the institute administrator.
c) To choose the authorised insurance companies and their work manner.
d) To determine the principals about compensating and to provide the payments get paid in minimum time.
e) To approve risk share and reassurance plan.
f) To determine the principals of directing the institute's sources to the investments.
g) To decide to make campaings about public relations and introductions.
h) To take all the precautions for the all buildings contained by the OEI, get insuranced

The board could make the scientific investigations and works done about the topics that relevant with the institute, and if thinks it is necessary, could a counselor who is a foreigner or a citizen, get employed for a limited time of project, without asking staff.

The Necessity Of Insuring And Get Insured:
Article 9: The buildings and unattached sections that contained by this SCL are get insured of OEI by their owners or owners of usufructs if exist.

The buildings and unattached sections that constructed for dwelling after ?ssued this SCL, if these have proper construction approving in relevant legislation, get insured by the end of a month after settling approve or dwelling in them.

The relevant insurance firm declares the finishing and necessity of renewing, at least a month earlier than the end of the contract by mail (promised back), telegraph or notary public. If the contract in not renewed through a month from the finish, the institute's responsibility comes to end.

The Insurance Deposit, Tariffs and Instructions, Commissions:
Article 10: The deposit amounts, general circumstances, tariffs and instructions, the principals of paying premiums about OEI and commissions that will be paid to the institute administrator and authorised insurance firms are determined by the Ministry and issued in the official newspaper.

The superficies of building,construction class and quality, the geological specifications of the area onwhich the building constructed, the risk of earthquake and similar factors are paid attention for the determining of insurance premiums.

The Government's Responsibility For The Legislation About The Catastrophes :
Article 11: The government's responsibility of giving credits and getting homes made that resourced from law number 7269 (about aids in natural plagues),and others,comes to end with the compensating the material loses that occured due to the eartquake on the insuranced buildings by the institute. Those who don't have OEI according to the article 9, cannot any claim for their casualty in the legislation about natural catastrophes.

Determining The Responsibles Of Insurance and Pursuing:
Article 12: Those whom obliged to make insurance are determined by the institute. The institute benefit from province's and municipality's land registration management registers through this operation. The Public institutes do not make any operation included land possession registration of a building contained by the OEI, unless it is proved that The OEI is made and the premiums are paid.

The Changing Of The Profit Owner:
Article 13: In the cases of changing of the profit owner, insurance continues with the latter.

The Responsibility Of Insuranced:
Article 14: The owner who changed the building and every unattached sections in a style of influenced or weaken the carrying system and unlike to the project, loses the claim of compensation as much amount as if the casualty occured or got bigger due to that changing.

The Subrogation Of The Institute:
Article 15: The institute that paid the compensations, take position of the insured as much amount as the payment paid. The subrogation cannot claim for insuranced's harm.

The Areas That Institute's Resources Could Be Used To :
Article 16: The institutes resources could be used only for these aims below;
a) The payments of compensations of buildings that insuranced by the institute,
b) All the expenses for running the institute and to the commissions that will be paid to the institute administrator,
c) The payments for the preventations that obtained from the markets of capital, reassurance and otherlike,
d) The payments for the investigations and works about the topics that relevant for the institute,

e) The payments of counsiling services.
f) The payments for public relations and introduction campaings,
g) The commissions that will be paid to the authorised insurance firms,
h) The payments about casualty determining operations,
i) Paying back of the advances that institute had from the government.

The Case Of Unsufficiency Of The Institute's Resources:
Article 17: The institute obtains security enough and as well as the need of insurance technic from the markets of reassurance, capital and otherlike, awarding it's responsibilities and resources. But whence the insured casualty more than farseen and whence excessived than the resources and the obtained security, it compensates on the rate of the multiply with resources and guard amount to the total compensation contained by the OEI.

Governing State:
Article 18: The institute's working principals and basis are regulated with a governivg state that issued by the Ministry.

The Temporary Article 1:
The Board president and members are appointed in three months after this SCL valid. Apart from the members who appointed for the first time and representate the president and institute administrator, new members are appointed instead of tree member who determined by lot drawing at the end of the third year.

Validity:
Article 19: The article 9 of this SCL is valid 9 months later , article 11's second lower article is valid 15 months later than issued. Other sentences are valid by issuing.

Application:
Article 20: The sentences of this SCL are applicated by the Council of Ministers.

Sub-component A2: Disaster Insurance Scheme (US$273.00 million).

The principal development objective of this sub-component is to support the Government Earthquake Insurance Program with the view of establishing and expanding national catastrophic risk management and risk transfer capabilities. To meet these objectives, the sub-component will create an insurance mechanism, which will make liquidity readily available to real estate tax paying owners of residential dwellings destroyed or damaged by an earthquake for the purpose of their repairing or replacement; reduce government fiscal exposure and the risk to the national economy due to major earthquakes; ensure the financial solvency of the Pool after all but the most catastrophic of events, such as those in excess of the Marmara earthquake; and reduce government financial dependence on the Bank and other donors' financial assistance in the aftermath of 'major earthquakes. To reach these objectives, the project will finance two major activities: (i) technical assistance to the General Directorate of Insurance (GDI) in establishing a Turkish Catastrophic Insurance Pool (TCIP) and ensuring its operational efficiency and financial soundness for the first five years of its existence; and (ii) initial capitalization of TCIP through a contingent loan facility. The total World Bank financing under the component is estimated at US$123 million, including a contingent loan facility amounting to US$I 00 million to finance insurance claims, premiums for reinsurance and excess of loss contracts and re-insurance intermediary services for the total of US$20.8, technical assistance in the establishment of TCIP, and incremental operating costs of US$2.2 million. The overall annual operating expenses of TCIP for the first year are estimated at around US$ IO million net of reinsurance cost and will have to be exclusively financed by the Turkish Government. In addition, the Government would make a US$0.1 million in-kind contribution toward the operating costs of the TMU, and pay any taxes/duties on locally procured goods or services. The Bank will finance I 00% of eligible claims, up to US$17 million, to the extent that accumulated premiums are insufficient to fund them, up to the attachment point of reinsurance of any kind. After that the Bank financing of the retention will be reduced to 40%, with the remaining 60% to be either financed by GOT or from other sources, mainly through premium income generated by TCIP. If the losses during the initial years are greater than the funds built up in the pool, together with any reinsurance or excess of loss reinsurance cover, the Bank will finance I 00% of claims, which cannot be met either by TCIP itself or its reinsurers. The Implementation Agency for the Project will be TCIP. Implementation will be initiated by the TCIP Management Unit set up within the General Directorate of Ins urance. Milli Reassurance has been selected by the Government to carry out the operational management of the Pool. Applications for withdrawal under TCIP component will need to be accompanied by certification that conditions have been met. At the end of five years, if the loan has not been completely drawn down, the balance may be drawn to develop TCIP capacity to insure against disasters of larger scale than the Marmara earthquake.

Sub-component A2: Disaster Insurance Scheme (US$273 million)

Executive Summary
The Risk. Turkey is exposed to severe seismic risk with the annual expected property loss estimated at around

US$800 million. In the recent Marmara Earthquake, the death toll reached over 17,000, with physical damages being estimated between US$4-7 billion or around 3% of GNP. Istanbul is the worst risk area, with an intensity VHI event expected to cost over US$25bn. Only 15% of insurable domestic residences in the Istanbul metropolitan area are insured, and outside Istanbul, a much lower proportion. The current Disaster Law guarantees the replacement of damaged residences at a nominal cost thus providing no effective incentives for risk management at the individual level and inhibiting the development of a national risk management strategy. This means that the level of risk is increasing dramatically, largely due to uncontrolled building in the Istanbul conurbation with concomitant increases in GOT contingent fiscal liabilities.

Existing Risk Transfer Capacity. The local insurance market is very fragmented, highly competitive and has a low capital base, partly reflecting high inflation protected returns available from lower risk activities. The prospects of the local industry expanding its coverage, if earthquake insurance were made compulsory, are limited due to its low financial capacity and the reluctance of leading international reinsurers to provide more capacity to the industry in its present state.

The Governinent Earthquake Insurance ProgranL The Government has proposed an Earthquake Insurance Program to transfer risk and limit its financial exposure to future natural disasters, as had been done in other countries such as California and New Zealand (amongst others). The key objectives as defined by the General Directorate of Insurance (GDI) as follows:
Ensuring that all real estate tax paying domestic dwellings have earthquake insurance coverage
Reducing government fiscal exposure to recurrent earthquakes
Transferring catastrophic risk to the international capital markets (including reinsurance)
Encouraging risk mitigation and safer construction practices through the insurance mechanism

Under the Program, compulsory earthquake cover will be introduced for all real estate tax paying dwellings. The cover will be provided by the Turkish Catastrophic Insurance Pool (TCIP, or Pool), which would offer coverage up to US$25,000 for each dwelling and US$3,000 for contents. For equity, claims settlements payments will be subject to "average". Coverage in excess of TCIP coverage could be obtained on a voluntary basis from private insurance providers.

Approved domestic insurance companies will act as distributors of TCIP policies, and private loss adjusters will be used in claim settlement. TCIP will be the sole-source provider of catastrophic insurance and will be set up by a Government Decree with its own Board of Directors and management. Enforcement will be the responsibility of local tax authorities. As reserves build up, they will be held in segregated trust or escrow accounts, and 50% will be held abroad. TCIP will initially charge a flat premium of US$50/dwelling, but in 2 years will move to premiums based upon its earthquake loss and pricing models.

The successful national reinsurance company, Mille Re has been appointed by GOT as TCIP Management Company. Milli Re's Board will be responsible for governance and major policy issues including investment management, premium structures and risk transfer (mainly a reinsurance decision). Milli Re will manage all TCIP insurance operations under procedures laid down in the Operational Guidelines (which are subject to prior approval by the World Bank) and policies of the TCIP Board. Outsourcing of major business functions to the private sector will be widely used.

Proposed Insurance Confonent in the MEER. While the Bank has made several emergency and rehabilitation loans to Turkey, this type of lending has severe limitations. Given Turkey's severe exposure to earthquakes, excessive government reliance on Bank retroactive lending and emergency donor relief can no longer be sustained. Efficient management of catastrophic risk can only be achieved through risk transfer to third parties outside the country, building up national reserves, and providing the incentives for reducing the level of earthquake vulnerability through risk-based pricing and TCIP supported risk management efforts.

The political momentum created by the Marmara disaster and sustained by concern for the plight of people still exposed in tents, together with the brief legislative chance for fast-track legislation until the end of this year, provides an opportunity to create the institution and amend the Disaster Law, which is not likely to occur again until the next major earthquake. In this context, Bank support is essential for TCIP to be created. TCIP earthquake cover up to US$25,000 limit will allow and encourage private insurers to write earthquake policies in excess of TCIP coverage and there is general support for the concept from the local insurance sector.

The insurance component of the MEER Project will finance two major activities:
(i) Technical assistance to the GDI in establishing TCIP with operational efficiency and financial soundness; and (ii) Initial capitalization of TCIP through a contingent loan facility.

A US$23 million technical assistance in insurance matters will result in quantifying risk, exposures and vulnerabilities, developing optimal financing structures and providing legal support to draft Operational Guidelines, and designing insurance Policies and IT systems, which will be installed for monitoring exposure and for handling premium and claims transactions. Modeling of earthquake losses and pricing will be undertaken, augmented by structural engineering research. The project will develop systems that are sufficiently robust to ensure that all premiums taken in on its behalf by insurance companies are promptly dispatched in full to TCIP, and both the premium collection and claims settlement systems will be subject to audit and spot checks. Training will be provided for TCIP and insurance company staff.

Reinsurance and/or capital markets risk transfer products will be purchased so as to transfer as much of the risk as is economical away from TCIP, using a reinsurance intermediary which will be chosen through an ICB procedure. When premiums build up within TCIP, they will be invested. At least 50% of these investments will be made in foreign assets, with the invested funds held in segregated trust or an escrow accounts. Assets will be managed by a professional asset management firm, selected through ICB. Considerable public education will be required and funding will be provided under both the TEFER and the current project.

TCIP will also contribute to the enforcement of building codes through a commercial arrangement with independent engineering firms that would be retained to certify the construction quality of new residential dwellings to be insured under the Program.

Uncommitted Contingent Loan Facility. A US$ 100 million sub-component provides contingent funding for repair and reconstruction through claims payments in case of an earthquake. It will be provided in the form of an uncommitted contingent loan facility. The balance of the risk capital requirements will be funded through reinsurance and the build-up over time of catastrophic insurance reserves from premiums net of expenses and risk transfer costs. The disbursement of the proposed Bank facility would be contingent upon: (i) progress in regulatory reform; (ii) satisfactory progress in the technical work on the launch of TCIP; (iii) the purchase of reinsurance that would ensure no gaps in the capital structure; and (iv) presented evidence of insurance claims. The results of the preliminary estimates of the initial capitalization requirement for TCIP, show that if no major event takes place, the risk of its insolvency would diminish to single-digit probabilities over the next 10 years. While the scheme will be mandatory, it will take time to achieve deep market penetration. Current projections point to a 30% penetration after a year and up to 60% after 5 years of TCIP operation.

Major Risks and Benefits of Component The component faces four main risks. The first is that a major earthquake with impact in excess of the Marmara event occurs in early years of TCIP's existence. The second relates to the enforcement of the compulsory insurance for private dwellings and the collection and transmittal of premiums to TCIP. The third relates to the cost and availability of reinsurance and capital market support during the early build up phase. Finally, there is a danger of the Government being unable to resist political pressures to turn TOP into an indiscriminate liquidity conduit to victims of a major earthquake.

The launch of TCIP would represent a major breakthrough in reducing the adverse financial and economic exposure of Turkey to catastrophic events, and would also increase the extent to which homeowners manage the risk to their own properties through a purchase of insurance from the private insurance sector (in excess of that provided by TCIP.)

Bank Financing. The total World Bank financing under the component is estimated at US$123 million, including a contingent loan facility amounting to US$1 00.0 million to finance insurance claims, premiums for reinsurance and excess of loss contracts and re-insurance intermediary services for the total of US$20.8, technical assistance in the establishment of TCIP, and incremental operating costs of US$2.2 million. The overall annual operating expenses of TCIP for the first year are estimated at around US$1 0 million net of reinsurance cost and will have to be exclusively financed by the Turkish Government. In addition, the Goverrunent would make a US$0.1 million in-kind contribution toward the operating costs of the TMU, and pay any taxes/duties on locally procured goods or services.

The Bank will finance 100% of eligible claims, up to US$17 million, to the extent that accumulated premiums are insufficient to fund them, up to the attachment point of reinsurance of any kind. After that the Bank financing of the retention will be reduced to 40%, with the remaining 60% to be either financed by GOT or from other sources, mainly through premium income generated by TCIP. If the losses during the initial years are greater than the funds built up in the pool, together with any reinsurance or excess of loss reinsurance cover, the Bank will finance 100% of claims, which cannot be met either by TCIP itself or its reinsurers.

The Implementation Agency for the Project will be TCIP; implementation will be commenced by TCIP Management Unit set up within the GDI; and Milli Re will carry out operational management of the Pool. The Government has also designated the TEFER PCU to provide all required procurement services.

Applications for withdrawal under TCIP component will need to be accompanied by certification that conditions have been met. At the end of five years, if the loan has not been completely drawn down, the balance may be drawn to develop TCIP capacity to insure against disasters of larger scale than the Marmara earthquake.

Country's Economic Exposure to Earthquakes. Much of Turkey is exposed to severe seismic risk with the annual expected property loss estimated at around US$800 million. In the century up to 1995, sixty-six earthquakes of intensity VIII or greater were recorded. Approximately 80,000 deaths resulted (including 30,000 in Erzincan in 1939). Since 1995, the main seismic shocks have been the Adana-Ceyhan earthquake in 1998, which is one of the events that led to the 1998 World Bank Turkey Emergency Flood and Earthquake Recovery Project (TEFER), and a recent even more devastating Marmara earthquake, which struck on August 17, 1999. The death toll from the Marmara earthquake alone is estimated at over 15,829 with over 43,953 wounded, while physical damages may be up to US$10 billion or around 3% of GNP. The two previous shocks (Dinar in 1995 and Erzincan in 1992) are estimated to have had direct fiscal costs to the Government of Turkey amounting to approximately US$1 billion. All three of these were intensity VII earthquakes or higher.

Recent modeling work indicates potential direct economic costs of over US$25 billion for the Istanbul area in the event of an intensity VIII event. While the return period for earthquakes for the Istanbul area is estimated at 1,000 years for intensity VII to VIII earthquakes, and 100 years for earthquakes of intensity V, recent work indicates that the probability of these events increases with duration since the last event. It is worth mentioning that it has been over 100 years since the last earthquake of intensity V occurred in Istanbul, with the dormant fault line being just miles away from the city in the Marmara Sea.

To compound the situation, the Turkish economy is known for its high geographical concentration, with the Istanbul metropolitan area accounting for over 50 percent of the national GDP. While there is some diversification of commerce and industry towards the Eastern regions, Istanbul's earthquake exposure will remain easily the peak risk in Turkey for the foreseeable future. Major infrastructure projects currently underway in these zones (earthquake zones 1, 2 and 3) include the Izmit Water Supply Project (US$635 million) and the Izmit Bay Bridge (US$I billion). Over the last decade, the population of the city has increased from 7.3 million in 1990 to over I I million, with many of the new arrivals occupying uncertified and uninsurable properties, sometimes built (often at night to avoid detection) in valleys and on unstable land. Most of these structures are likely to collapse under the first impact.

Current State of Property Catastrophic Insurance. Despite a great seismic and flood exposure, less than 15% of insurable domestic residences in the Istanbul metropolitan area are insured, with a higher percentage applying to commercial property. Outside Istanbul, the insured base is much lower, with estimates as low as 2% of domestic dwellings being quoted. Among the main reasons for the low penetration are: (1) strong disincentives to insure against catastrophic risks embedded in the provisions of the current Disaster Law, which guarantees the replacement of damaged residences at a nominal cost; (2) lack of knowledge of the benefits of insurance, compounded by cultural factors; and (3) poor claims performance of some insurers and the heavy retention (in the form of coinsurance and deductible) required of the policyholder for the earthquake risk (up to 20% of loss, plus 5% of sum insured).

While currently there are 41 companies underwriting property and engineering coverages (including earthquake), the market is very fragmented, with the top 6 companies writing just over 50% of earthquake policies. The market is highly competitive. The industry is characterized by (1) low capital base (insufficient reserves) for writing fire and earthquake coverage; (2) lack of detailed hazard maps at the local level and sophisticated risk assessment methods, which causes high uncertainty with regard to the probability of a specific loss and its magnitude; (3) insufficient technical expertise and shortage of qualified personnel; and (4) low retentions of earthquake risk, with up to 90% of the risk being ceded to reinsurers. Up to 32% of the quota share of premiums passed on to reinsurers is rebated back to the insurers in the form of the exchange (business) commissions. In the absence of this reinsurance based washing' of earthquake premiums, two thirds of all such premium income would have to be set aside in catastrophe reserves under the current law, and together with associated investment income held for 15 years before being released to accounting profit.

Under-writing standards have been deteriorating as companies fight for premium income. The results of this fierce competition are particularly obvious in the case of fire premiums, which are priced only nominally, due to the bundling of earthquake and fire covers together in one policy. As a result, the fire premiums are being subsidized from the proceeds of the exchange commissions for a regulated earthquake cover rather than being used to accumulate reserves against the eventuality of an earthquake. The low capital base forces most domestic insurers to cede up to 90% of risk to re-insurers. As it is, total accumulated industry earthquake reserves for residential properties of 12/31/98 amounted only to approximately US$6 million (current conversion) against an annual earthquake premium income from homeowners of US$23 million. These low risk retentions effectively make local insurance companies act as distributors and claim settlers rather than risk carriers. The small capital base of the industry can also be illustrated by the size of its consolidated balance sheet, which is similar to that of a middle-size bank. As the world reinsurance markets have passed through a cyclical low, intense competition for Turkish business has led to low prices for excess cover, and high commissions for quota share, a proportional reinsurance treaty which is generally arranged for the first layer of risk. In such a reinsurance treaty the insurers' obligation is proportional to the percentage retained and the remainder being paid for by the reinsurer. The Marmara event in itself does not seem to have made a large impact, but the attitude of international reinsurers is clearly hardening because of the perception of inadequate returns and poor underwriting standards by primary insurers. This is leading to pressure for reduced commissions and the reduction of cession limits. Unless companies are able to significantly improve their underwriting standards and price fire risk appropriately, they will come under increasing pressure. The prospects of the local industry expanding its coverage, if earthquake insurance were made compulsory, are limited due to its low capital base and the reluctance of leading international reinsurers to provide more capacity to the industry in its present state. Well-founded concerns over Turkish building standards are an aggravating factor. A solution to the current lack of earthquake coverage through a rapid expansion of the private sector does not appear feasible, at least in the immediate future, due to the reasons described.

The Government Earthquake Insurance Program. In these circumstances, the Government has proposed an Earthquake Insurance Program. The Government proposal aims at establishing catastrophic risk transfer and risk financing mechanisms and institutions that can limit its financial exposure to natural disasters in the future. The Program draws on international experience of successful government efforts in raising the financial preparedness for major catastrophic events. As shown by the successful experience of state-sponsored (and in some cases state-administered) catastrophe insurance pools in Norway, France, Spain, New Zealand, California and Florida, catastrophe risks can only be funded through a certain degree of compulsion. A similar mechanism is proposed in Turkey, if sufficient earthquake reserves are to be accumulated on an affordable basis, while still reflecting risk levels (see Insurance Technical Paper X in PIP for detailed commentary on the program). The New Zealand and California Earthquake Authorities are the prime examples. Responding to a market failure to provide adequate insurance coverage for residential properties in earthquake-prone areas, these institutions found ways to establish affordable, and yet actuarially sound, pricing of such insurance products. Both institutions have transferred away large portions of risk using reinsurance of different kinds, arranged for stand-by liquidity facilities, and both have considered the use of capital market instruments.

The key objectives for the proposed Program have been defined by the General Directorate of Insurance (GDI) as follows:
• Ensure that all real estate tax paying domestic dwellings have earthquake insurance coverage
• Reduce government fiscal exposure to recurrent earthquakes
• Transfer catastrophic risk to the international capital markets (including reinsurance)
• Encourage risk mitigation and safer construction practices an insurance mechanism

Under the Program, compulsory earthquake cover will be introduced for all real estate tax paying dwellings. The cover will be provided by the Turkish Catastrophe Insurance Pool JCIP, or Pool), which would offer coverage up to US$25,000 for each dwelling and US$3,000 for contents. To ensure that owners of expensive properties pay a fair premium and to enable the private insurance sector to expand, claims' payments will be subject to "average" (see Insurance Technical Paper VI in PIP). "Average' is a method through which claims are scaled down in such a proportion so as to avoid insureds moral hazard. The payouts to policy holders are calculated according to the following formula:

Claims Paid = (Maximum Sum Insured/ Property Value at time of disaster) * Losses

The result of this process ensures that owners of underinsured property have an incentive to purchase voluntarily a top-up cover from the private sector. Coverage in excess of TCIP coverage could be obtained on a voluntary basis from private insurance providers.

Approved domestic insurance companies will act as distributors of TCIP policies, and will be paid an appropriate fee. Claim settlement will be the responsibility of TCIP and will be based on assessments by independent private loss adjusters appointed by the TCIP to act on its behalf. TCIP will be the sole-source provider of catastrophic insurance. The Pool will be set up by a Government Decree by December 1999 as a separate, state-owned and controlled legal entity, with its own Board of Directors and management. The Board will have representatives from the government, the private sector, and the academic community.

Enforcement will be the responsibility of local tax authorities. As reserves build up, they will be held in a segregated trust or escrow account and managed in accordance with international best practice.

TCIP will establish its premiums based upon its earthquake loss and pricing models, and will provide its retail distributors of its policies with a premium schedule agreed in advance. TCIP's pricing models would account, inter alia, for seismicity, local soil conditions, and construction type and quality.

The national reinsurance company, Mille Re, has been appointed by GOT as TCIP Management Company, subject to approval by Milli Re's Board. The company was formed in 1929 based on compulsory cession by Turkish insurers. It has a successful track record as the manager of several pools, including FAIR (Federation of Afro-Asian Insurers and Re-insurers) and ECO (Economic Cooperation Organization Reinsurance Pool). While Milli Re is 98% privately-owned, three out of six Directors on its Board are appointed by the Treasury. Milli Re occupies the central position in the Turkish insurance industry and has strong management and good technical expertise (see Insurance Technical Paper VII in PIP).

As the Pool Manager, Milli Re will: (i) implement the policies laid down by TCIP Board and as set out in its management contract; (ii) supervise the distribution of policies through insurance companies approved by TCIP; (iii) manage claims' payment; (iv) arrange for risk transfer to the global re-insurance and capital markets; and (v) manage the Pool's operations so as to ensure its financial viability (see Insurance Technical Paper V in PIP). Management of certain operational matters, such as policy processing, reinsurance, investments, etc. is likely to be outsourced.

World Bank Lending for Disaster Relief in Turkey and the Proposed Operation. Over the years, the Bank has made several emergency and rehabilitation loans to Turkey. The latest loan, the Emergency Flood and Earthquake Recovery Project (US$369 million), was granted at the end of 1998. Despite the on-going and quite effective Bank emergency projects in the aftermath of natural disasters in Turkey, this type of lending has limitations. Firstly, due to the country exposure limits, the Bank cannot provide all the liquidity needed in cases of larger catastrophic events, which frequently leave the Government short of billions of dollars of urgently needed financial resources. Secondly, due to their generally large size, emergency loans tend to crowd out other important development lending programs, which have to be either postponed or
substantially reduced. Finally, excessive government reliance on Bank retroactive lending and emergency donor relief can no longer be considered sustainable in light of the frequent major catastrophic events caused by Turkey's inherent seismicity.

In Turkey, the culture of risk management is almost non-existent the among property owners, Less than 1O% of dwellings are insured in major cities despite their proximity to earthquake fault lines. Most dwellings which are currently insured have a value in the range of US$60,000-200,000. As a result, the risk of damage to less expensive dwellings, which account for most of the housing stock in Turkey, is primarily borne by the homeowners and the Government due to the current provisions of the Disaster Law. A more efficient management of this catastrophic risk can be achieved through risk transfer to third parties outside the country and by building up national reserves.

Due to a low level of reserves in the local insurance industry, it would take a long time to build up the private insurers' capital necessary to support a rapid increase in the retention of risk if earthquake insurance cover is made mandatory. In addition, a pure private sector approach is unlikely to succeed as some insurers will attempt to underwrite only those risks that are overpriced, leading to instability and possible bankruptcy for those, who may choose to underwrite the wrong part of the portfolio.

Under these circumstances, a joint public/private sector solution is necessary to reduce the risk borne by the Government and property owners. Given the above-mentioned considerations and the political momentum created by the Marmara disaster, as well as public and industry recognition of the need for action, Bank support of the Government Program is crucial.

Bank assistance for the creation of TCIP, which will represent the interests of the Government, private sector, and policy holders, will greatly contribute to a rapid and efficient implementation of the compulsory earthquake insurance program in Turkey that otherwise would have been severely constrained by the low level of reserves and insufficient earthquake underwriting capacity in the private insurance industry. In addition, the implementation of the proposed insurance component will ensure that less advantaged groups of the Turkish population have access to a reliable catastrophe insurance mechanism.

In addition, TCIP earthquake program, designed for the riskier lower end of the market (up to US$25,000 limit), will allow private insurers to free up a corresponding amount of risk capital. The availability of this additional capacity could be applied to write earthquake policies in excess of TCIP coverage, which would facilitate further penetration of the local property insurance market. The creation of TCIP will also bring about added benefits to the local insurance industry such as (i) establishment of best practices in underwriting property risks, and (ii) a better enforcement of building codes.

Objectives. The principal development objective of the sub-component is to support the Government Earthquake Insurance Program with the view of establishing and expanding national catastrophic risk management and risk transfer capabilities. To meet these objective, the sub-component will create an insurance mechanism, which will make liquidity readily available to real estate tax paying owners of residential dwellings destroyed or damaged by an earthquake for the purpose of their repair or replacement, reduce government fiscal exposure and the risk to the national economy due to major earthquakes, ensure the financial solvency of the Pool after all but the most catastrophic of events, such as those in excess of the Marmara earthquake, reduce goverment financial dependence on the Bank and other donors' financial assistance in the aftermath of major earthquakes.

Key regulatory and institutional reforms are also the focus of the sub-component. The sub-component will:

(i) facilitate a major reform of the Turkish Disaster Law and related legislation that will reduce government financial exposure and increase its financial preparedness as well as that of households for major earthquakes; (ii) support the development and implementation of a national risk management and risk transfer strategy by providing technical assistance for the start-up of TCIP; (iii) improve the enforcement of the Building Code through insurance mechanisms; and (iv) facilitate the development of local earthquake underwriting capacity, and foster the development of related lines of business, such as professional and liability insurance.

Description. The sub-component will finance two major activities: (i) technical assistance to the GDI in establishing TOP and ensuring its operational efficiency and financial soundness for the first 5 years of its existence; and (ii) initial capital support of TOP through a contingent loan facility.

Technical Assistance to GD1 in the Establishment of TOP (US$23.00 million). TOP will be formed as a new independent public sector institution by Government decree. The Board of Directors will be appointed with public and private sector representatives (see Insurance Technical Paper 11 in PIP). The Board will appoint the TCIP's Chief Executive.

The sub-component will support the establishment of TOP through technical assistance in insurance matters, both technical and legal. Part of this technical assistance work will also be funded under the TEFER loan. Under this sub-component, technical assistance will be provided to the TOP Management Unit (TMU) and to Milli Re to set-up TCIP's business and information systems, draft operational guidelines and a business plan. Information technology systems will be installed, both for monitoring exposure and for handling premium transactions with insurance companies and claims transactions with loss adjusters. Every effort will be made to obtain systems already used by the insurance industry in Turkey or elsewhere, so as to avoid the costs and risks of development of new systems. Development of the following technical activities by TOP will be financed (see Insurance Technical Paper IX in PIP for Procurement Arrangements):

(1) Technical Assistance in Modeling and Pricing. Modeling of earthquake losses and pricing will be undertaken. This will be augmented by structural engineering research, both to assist in estimating damage ratios, and also to verify or suggest modifications to the current earthquake-rating tariff. Part of the modeling work is also supported under the TEFER project and implementation should start shortly.
(2) Insurance Policy Design. Technical assistance will be provided to TOP in finalizing its insurance policy product. This work will be based on Government proposals, current Turkish policy conditions, and, where appropriate, available international experience. The terms and conditions of the policy will be refined in light of the results of such technical work.
(3) Technical Assistance in Developing TCIP Distribution Systems. The distribution of TCIP earthquake policies will be undertaken by participating, approved domestic insurance companies. The settlement of claims will be carried out

by TCIP, supported by Milli Re, using duly qualified, independent, private loss adjusters that are normally used by the industry. Major work will be carried out under the sub-component to develop systems that are sufficiently robust to ensure that all premiums taken in on its behalf by insurance companies are promptly dispatched in full to TCIP. Both the premium collection and claims settlement systems will be subject to audit and spot checks so as to discourage defalcation or delay in payment. This work will build on the results of technical assistance in systems design and in staff training provided under the TEFER project.
(4) Training. Training in using risk pricing software will be provided for TCIP staff and for insurance company staff and agents. Twinning with the California Earthquake Authority (CEA) and the New Zealand Earthquake Commission (EQC) will be sought so as to provide for experience and skills transfer to TCIP staff, which will be also funded under the TEFER project.
(5) Reinsurance and Reinsurance Intermediary Services. Reinsurance and/or capital markets risk transfer products will be purchased so as to transfer as much of the risk as is economical away from TCIP. A reinsurance intermediary will be chosen through an ICI3 procedure to design a risk financing program based on modeling to achieve the objectives of TCIP. It will negotiate with re-insurers and/or the capital markets, evaluate the quotations and products offered, and report on their cost effectiveness in terms of the cost of reducing risk. Throughout the process, TCIP will interact with Milli Re and the reinsurance intermediary, and at the end will decide which products to purchase. The reinsurance intermediary will then place the program in the market. The fee of the insurance intermediary during the set-up year will be funded under the sub-component.
(6) Investment Policy and Fund Management. As and when premiums build up within TCIP, they will be invested. The invested funds will be held in a segregated trust or an escrow account for the benefit of TCIP beneficiaries, so as to ensure that they are protected from any possible creditor action or other use. Investments will be subject to constraints and allocation criteria determined in the TCIP Operations Manual. The investment allocation criteria will take account of the underlying purpose of reducing the financial risk to TCIP and ultimately to its policy holders. For that reason, it is envisaged that at least 50 percent of funds will be invested in internationally liquid investment grade assets, such as foreign government bonds-linked notes to avoid a major loss in assets value due to an internal catastrophic event in Turkey.
(7) An investment adviser (a firm of world standing) will be selected through ICI3 to ensure that the best return is obtained from the investment portfolio, subject to risk and liquidity objectives of TCIP. The investment adviser will (i) advise on investment strategy; (ii) advise on investment mandate and constraints; (iii) advise on asset allocation; (iv) assist in competitive selection of asset managers by reference to its own database of performance; and (v) monitor the performance of the chosen asset managers against the performance of their peers. The fee of the investment manager will be funded under the sub-component.
(8) The assets will be managed by a professional asset management firm. A custodian will also be appointed in accordance with best commercial practice so as to safeguard the assets, and this custodian may be either a firm regularly used by the asset manager (if that firm is independent and reputable), or else a separate custodial firm.
(9) Public Education. Since the sub-component involves a ma or change in catastrophe insurance, considerable public education will be required and will be carried out by TCIP or its agent under the project. Funding for these activities will be provided under both the TEFER and the current project.
(10) Improving Enforcement of Building Codes. In addition to its core earthquake insurance functions, it is expected that TCIP would also contribute to the enforcement of building codes through a commercial arrangement with independent engineering firms that would be retained to certify the construction quality of new residential dwellings to be insured under the Program. This work will be jointly funded under the TEFER and the current project.

Initial Capital Support of TCIP through an Uncommitted Contingent Loan Facility (US$250 million). The sub-component will enable the launch of TCIP, which will act as a stand-alone provider of catastrophic insurance in Turkey. This objective will be achieved by providing US$ 100 million of Bank financing in the form of an uncommitted contingent loan facility for the initial capital support of this institution. Although the estimated initial risk capital requirements are much higher, it is envisaged that they will be funded through reinsurance and the build-up of catastrophic insurance premiums, which will happen over time. The disbursement of the proposed Bank facility will be contingent upon: (i) progress made by the Government in enacting a package of regulatory reforms (Insurance Technical Paper I in PIP);
(ii) satisfactory progress achieved in the technical work on the launch of TCIP funded under the TEFER;
(iii) the purchase of reinsurance from major international re-insurance providers; and (iv) presented evidence of insurance claims.

TCIP's Initial Capital Support Requirements. To estimate the initial capitalization requirement for TCIP, a cumulative loss curve for Turkey has been developed based on 106 years of earthquake experience and allowing for the fact that only real estate tax paying dwellings will be covered by TCIP (see Insurance Technical Paper 11 in PIP). In addition, certain assumptions have been made about premium structures, objectives of the Pool and the state of the reinsurance market. The results of this preliminary model (which will be upgraded by the study to be carried out under the TEFER loan) are shown in Insurance Technical Paper 11 (see PIP), which contains estimates of TCIP exposure in, excess of premium build up requiring external support. According to these estimates, the probability of TCIP insolvency, with no reinsurance or other support and assuming full penetration of eligible households, is around 30% in the first year with an initial capital of US$250 million. However, if the initial capitalization is increased to US$1 billion, the probability of TCIP insolvency reduces to around 10%. While creating a sufficient safety margin for TCIP is an important precondition for ensuring the credibility of the proposed reform of earthquake insurance in Turkey, the financial considerations put certain limitations on the initially feasible Government contribution towards TCIP's capitalization. Even so, the 30% risk of TCIP's insolvency in the first year, given recent reinsurance market conditions, can be brought down to an acceptable level by placing reinsurance contracts with international re-insurers. A preliminary analysis suggests one feasible structure, which would cover losses in excess of US$1 00 million up to US$600 million. Under this preliminary model, the retained risk for TCIP would be around US$10-17 million in the first year of its operations, plus any accumulated unfunded set up costs, less accumulated net premiums, plus any claims in excess of the upper limit of the excess of loss cover (US$400 to US$600 million). The World Bank facility will be available to protect both the lower gap, which would close over time and the excess at the top in case of a very severe event in the top 20% probability range. Chart I in Insurance Technical Paper 11 illustrates this preliminary financing structure. The reinsurance to be finally placed would be designed on the basis of Dynamic Financial Analysis modeling so as to maximize the risk reduction, subject to budget constraints.

Over time, with the growth of TCIP's reserves, assuming mandatory catastrophic insurance coverage is introduced and no major event takes place, the risk of its insolvency would diminish to single-digit probabilities over the next 10 years.

Although with the accumulation of TCIP reserves, its ability to retain more catastrophic risk may increase, at the initial stage, TCIP risk management policy would be focused on transferring most of the catastrophic risk to third parties outside the country. To this effect, TCIP would enter into contracts with major reinsurers, and/or issue catastrophic bonds, to prevent an abrupt shortage of liquidity in case of major catastrophic events, and, where appropriate, arrange for stand-by emergency liquidity facilities with international lenders.

While TCIP premium pricing would be based on sound actuarial principles, it may provide subsidized insurance coverage to low-income groups upon Government request. However, it is envisaged that TCIP would by law be entitled to an immediate reimbursement by the Government for the full amount of subsidy dispensed to these policyholders. TCIP would be entitled to discontinue the coverage of subsidized policyholders if the amount of compensation from the Government falls short of the subsidy costs incurred by the institution.

While the scheme will be mandatory, it will take time to achieve deep market penetration. Current projections point to a 30% penetration after a year and up to 60% after 5 years of TCIP operation.

Major Risks and Benefits of the Sub-component. The sub-component faces three main risks. The first is that a major earthquake with impact in excess of the Marmara event occurs in the early years of TCIP's existence. While this risk can be mitigated by placing reinsurance contracts with third parties, transferring some of the risk to capital markets and by prorating the claims, the base risk still remains. The second major risk relates to the enforcement of the compulsory insurance requirement for private dwellings and the collection and timely transmittal of premiums to TCIP. If TCIP fails to reach the level of market penetration agreed upon with the Bank or falls short of enforcing the timely collection and remittance of premiums, it would be unable to provide the agreed upon matching contribution to the Bank funds in case of a major earthquake. This risk can be addressed by intensive technical assistance to TCIP in the first years of its operations and close monitoring by the Bank of its market penetration and premium collection efforts. Finally, there is a danger of the Government being unable to resist political pressures to turn TCIP into an indiscriminate liquidity conduit to victims of a major earthquake in the future, regardless of the terms of their coverage under the program. Although this risk cannot be completely mitigated, the proposed financial design of the project, in addition to the legal covenants in the loan agreement, provides strong financial disincentives for that type of policy action.

If successful, however, the launch of TCIP would represent a major breakthrough in reducing the adverse financial and economic exposure of Turkey to catastrophic events. This development would have a large positive impact on the rate of the country's economic growth, and its ability to address the financial consequences of catastrophic events on its own without resorting to massive emergency aid from international financial institutions and donor countries. It would also increase the extent to which homeowners manage the risk to their own properties through a purchase of insurance provided both by TCIP and the private insurance sector in excess of that offered through TCIP.

Financing. The total Bank financing under the component is estimated at US$123 million, including a contingent loan facility amounting to US$ I 00.0 million to finance insurance claims, premiums for reinsurance and excess of loss contracts and re-insurance intermediary services for the total of US$20.8, technical assistance in the establishment of TCIP, and incremental operating costs of US$2.2 million. The costs of this component are summarized in Table 2.

The overall annual operating expenses of TCIP for the first year are estimated at around US$ IO million net of reinsurance cost (see Insurance Technical Paper III in PIP). This amount will have to be exclusively financed by the Turkish Government. In addition, the Government would make a US$O.I million in-kind contribution toward the operating costs of the TMU. This contribution would include rent, travel, utilities and staff costs. The Government would also cover any taxes/duties on locally procured goods, as well as VAT on consultant services contracts.

The Bank will finance I 00% of eligible claims, up to US$17 million, to the extent that accumulated premiums are insufficient to fund them. The other aspect of Bank financing will be when the losses during the initial years are greater than the funds built up in the pool, together with any reinsurance. In this situation, the Bank will finance I 00% of claims, which cannot be assumed either by TCIP itself or its reinsurers up to US$ I 00 million. However, commencing the nineteenth month of TCIP operations, the Bank financing of eligible claims prior to any reinsurance will be reduced to 40%, with the remaining 60% to be either financed by GOT or from other sources, mainly through premium income generated by TCIP.

The Bank will finance some TCIP start-up business costs directly related to project implementation, such as technical assistance to TCIP and the TMU (both foreign and local), equipment, training, and incremental operating costs, mainly the costs of short-term consultants hired for the purposes of assisting the TMU during the implementation period. Additional financing of technical assistance and project incremental costs in the US$6 million will be provided under the TEFER project.

Table 2: Costs of the Disaster Insurance Scheme

Bank Government TOTAL Financing Financing
(US$ million) (US$ million) (US$ million)
Technical Assistance to GDI in the 23.00 0.00 23.00
Establishment of the TCIP and reinsurance
Initial Capital Support of TCIP through an 100.00 150.00 250.00
Uncommitted Contingent Loan Facility ri_o@@ 1 123.00 F150.00 _T273.00

Implementation. The implementing agency for the sub-component is the Turkey Catastrophic Insurance Pool, a semi-independent public sector body to be established by the Government of Turkey. This legal entity will carry responsibility for the sub-component. While TCIP is being established, the implementation of the project will be commenced by the TCIP Management Unit set up within the GDI. Once TCIP is formed and TCIP Board of Directors (which represent the Goverment and the interests of the private sector and academic community) is appointed, the Management Unit will provide technical support to the Board. The Management Unit will then be responsible for monitoring the performance of the Pool Management Company, and provide substantive leadership for the sub-component, serve as an interface for relations with the Government and the Bank on key issues of project implementation. Milli Re, has been appointed by the Government to act as TCIP Management Company and carry out operational management of the Pool. The Government has also designated the TEFER PIU to provide all required procurement services. The organizational chart of the envisaged implementation arrangements is shown in Insurance Technical Paper VIII (PIP). Discussion of the key elements of the project management structure follows.

General Directorate of Insurance. The GDI will play a leading role in implementation. In the early stages, a considerable number of detailed policy decisions will need to be made, and some of these will require Government action. On an on-going basis the responsibilities of GDI will require that oversight be maintained over TCIP, Milli Re, and the scheme as a whole.

TCIP Management Unit (TMU). A TCIP Management Unit will be set up within GDI to monitor the performance of the Pool Management Company and to implement the Bank catastrophic insurance sub-component. The TMU tasks and project-related activities will be directly linked to the GDI's Earthquake Insurance Program, which will be achieved by the initial placement of the TMU within GDI, and the on-going contribution of GDI's staff to the TMU. The functions of the TMU will initially include:

(1) Procurement of the key service providers for TCIP, including the Investment Adviser, the Asset Manager, and the Reinsurance Intermediary. Terms of reference will be drawn up, Requests for Proposals developed and dispatched, evaluations conducted, and recommendations for appointment made to TCIP Board

(2) Preparation of the Pool Management Contract and Service Agreements with Milli Re and insurance companies, with the assistance of the Technical Advisers funded through the TEFER Project And when TCIP is established and its Board appointed, the functions of the TMU will include:

(3) Preparation of annual budget estimates for project-related activities (tasks) and submission of them to TCIP Board for approval
(4) Financial reporting to TCIP Board
(5) Transmission of claims reimbursement details to the Bank, the Treasury, or reinsurers as appropriate, receiving disbursements relating to these, and making sure that payments on these are made promptly to insured
(6) Tracking activities within the project, and in particular the Project Management Company

The Head of the TMU (Project Director) would be the head of the Earthquake Insurance Program and of the Bank project and would be appointed by the GOT. The TMU staff would consist of the staff of the Treasury, and consultants hired through the'project insurance component. The GDI will initially contribute 4 staff members to the TMU.

The staff of the TMU will report to the Project Director on all substantive issues of project implementation. Hiring of all consultants for the TMU will be subject to the Bank's procurement rules for the selection of individuals. The TMU will be located initially on the premises of GDI, but may move to those of Milli Re once the Pool is set up.

During the preparation and implementation stages of the project, the TMU will provide accounting and financial reporting services in support of disbursements out of the Bank contingent loan facility. Accounting and financial reporting services for all technical assistance related activities under the insurance component will be provided by the PIU.

Turkish Catastrophic Insurance Pool. TCIP will be the body charged with the success of the overall Government Earthquake Insurance Program and the body held accountable for any shortcomings. It will be established by Goverru-nent decree to be signed by January 28, 2000. The objectives and the key principles of its operations will be outlined in the package of catastrophic insurance legislation, which is currently being prepared by the Treasury. TCIP is to be governed by a Board of seven members: three coming from the Government, three from the insurance industry, and one a senior technical person skilled in earthquake science or earthquake engineering. The main functions of the Board and key responsibilities of the Board Members are spelled out in Insurance Technical Paper IV (PIP).

TCLP Management Company. Milli Re, the Turkish national re-insurance company, was appointed by GOT as TCIP Management Company. The services to be performed by Milli Re will include management of the distribution of policies and the settlement of claims (see Insurance Technical Paper V in PIP for details). While Milli Re is already carrying out many of these functions locally, its expertise will be augmented to assist in the major changes to a compulsory public scheme with somewhat different cover and procedures. Twinning arrangements will be sought with CEA or EQC to share the experience of a compulsory public earthquake scheme, with exchange of staff in both directions.

The new scheme requires significant IT services, both to record in a database the properties that are insured, and also to track and account for transactions relating to premiums and claims. Of major importance is the monitoring of the exposure of TCIP, both for the sake of its own risk management, and also to assist in its dealings with reinsurers or capital markets. Provisions are made in the TEFER and the current project to assist TCIP in setting up such systems.

Some of the activities will be carried out by commercial organizations chosen and contracted to do so. These include the investment adviser, reinsurance intermediary, IT provider, and legal and PR advisers if these are outsourced. Funding is provided under the sub-component for the initial appointment of the investment adviser and the reinsurance intermediary, and for a substantial public education campaign.

Reinsurers. Since the exposure of TCIP commences as soon as its policies are issued, and since it will take some time for funds to build up from premiums, reinsurance purchases will be made at an early date to protect TCIP and the Government. The initial purchase, which is designed to provide for claims' payment in the event of another earthquake in the near future, will be funded under the project.

Insurance Companies. Premium collection will be undertaken by participating insurers and their widespread network of agents. IT system changes will be undertaken by the participating insurers, and staff and agents will be trained in TCIP policy conditions and procedures. Funds to assist in the training will be provided under the TEFER project. Audit and monitoring systems will also be established.

Project Implementation Unit. The PIU selected for the implementation of the MEER will assist with the procurement of goods and services purchased with IBRD funding.

Local Government. Local government will also be involved in two ways. The real estate tax records at local authorities will form the basis of insurance cover. Local government property tax inspectors will also assist in the enforcement of the compulsory requirement to insure with TCIP.

Flow of Funds and Disbursement. TCIP will act as sole provider of mandatory earthquake insurance. Policies will be issued by TCIP and distributed to the public through approved domestic insurers, who will not assume any risk of loss. The standard form earthquake insurance policies will be for replacement costs of property damaged or destroyed; however, policyholders may have the option of not replacing or repairing such damaged property, electing instead to receive only its depreciated value. Applications for withdrawal under TCIP component of the Bank Loan can only be made for claims by policyholders that have elected to receive the replacement value of property damaged or destroyed in an earthquake ("Eligible Claims"). As a result, both TCIP's and Milli Re's accounting systems will need to be able to distinguish between claims for replacement value and claims for depreciated value, with only the former being eligible for reimbursement under the Bank Loan.

Applications for withdrawal under the contingent facility loan could only be made after an earthquake and would need to be accompanied by a certificate from a senior officer of TMU to the effect that (a) the amount claimed is in respect of TCIP retention, or in respect of the excess of the reinsurance recoveries (including both quota share and excess of loss covers), or both, in any case as in effect as at such date, together with an indication of the relevant amount, (b) with respect to any amount claimed for purposes of payment of TCIP retention, TCIP either has paid, or has funds available to pay, at least 60% of such retention amount (with evidence satisfactory to the Bank) and the amount claimed does not exceed 40% of the retention amount, (c) with respect to any amount claimed for purposes of the excess of the reinsurance recoveries, the amount actually received by TCIP under reinsurance contracts then in effect (with evidence satisfactory to the Bank), (d) the amount claimed has not been claimed previously, and (e) such amount
requested has not been financed and will not be financed from any other source, and will be used exclusively for purposes of the payment of Eligible Claims. Notwithstanding (b) above, if requested by the Government, the Bank will fund up to US$17 million toward the payment of the then applicable retention amount. The maximum aggregate amount which the Bank will advance in respect of the payment of reinsurance retentions and amounts in excess of reinsurance recoveries is equal to the amount of the Loan allocated to such activity (US$ I 00 million).

Based on the above, and assuming the absence of any event of suspension either under the MEER Loan, or under any other loan made by the Bank to or guaranteed by the Republic of Turkey, the Bank will advance the amount requested under the application for withdrawal to a segregated account opened in the name of TCIP with a commercial bank acceptable to the Bank and which has previously provided to the Bank a standard form comfort letter.

TCIP will be entitled to make multiple applications for withdrawal under TCIP contingent loan facility up to the amount of the Loan allocated to such activity.

If claims from any one event exceed the total capital, credit and reinsurance resources available to TCIP, then claims from that eventwill be paid pro rata. The operation is being designed in the context of the Banles overall disaster management strategy to cushion the impact of natural disasters on vulnerable groups through promotion of mitigation and catastrophic insurance.