



2015 **TREIF** Annual Report

序言

2016年2月6日發生於高雄市美濃區之芮氏規模6.4地震,是繼1999年9月21日南投集集大地震之後,臺灣近17年來發生災情最為慘重的地震災害, 共造成116人死亡、550人受傷,60餘棟建築物結構 受損,約900戶家庭失去居所。

本基金為住宅地震保險制度之中樞組織,每年持續辦理模擬演練,期能在地震發生時,提供受災保戶迅速完善的理賠服務。故2016年2月6日地震發生後,本基金同仁取消休假,立刻啟動緊急應變機制以確實掌握災情,協調各簽單公司於翌日在臺南市重災區現場設立災區聯合理賠服務中心,尋找建築物受損之保戶,處理住宅地震保險理賠等相關事宜,並主動於災後第二天2月7日給付首筆臨時住宿費用新臺幣20萬元予受災保戶,災後第八天即給付第一批保險理賠金,理賠速度在國內無人能出其右。過年期間給付24筆臨時住宿費用,震後安撫民心的效果極大,發揮本政策性保險制度成立的果效。此外,本基金厲行節約,在各方努力辛苦治商之後,2015年超額賠款再保險合約費率降幅逾17%,2016年再降約10%,預計2017年仍將持續調際。

為期本保險制度更加健全及完善,本基金每年 仍持續檢討及研議各項方案,以強化本保險制度, 俾符合社會大眾期待及需求。綜觀2015年本基金具 體工作績效概述如下: (1)制度面:評估建置負債 適足準備機制之可行性。(2)理賠面:研議賠案 彙整審查與共保攤賠作業程序、研議建制本保險代



音事長 陳明仁

Preface

位追償及防騙機制、研議各類型住宅建築物全倒之定義、相關理賠作業處理程序之檢討修正、2015年度理賠機制模擬演練計畫及執行等。(3)法制面:本保險相關要點、規範、基準及保單條款之檢討修正等。(4)宣導及資訊面:資訊安全管理制度(ISMS)暨個人資料管理制度(PIMS)之導入、地震保險基金資訊設備(含虛擬化主機)環境之檢視與評估等。

為提升國人地震防災風險意識,本基金致力推廣各項宣導活動。2015年特與 嘉義市及臺東縣政府合辦地震防災教育國中小學藝文競賽,共有138所學校熱烈 響應,並補助偏鄉國中小學校學生參觀921地震教育園區,藉此深植國家未來主 人翁地震防災觀念。另,本基金亦成立臉書專屬網頁,辦理各項有獎徵答活動及 定期更新網頁內容,以吸引廣大網民瀏覽增加彼此互動,以達到地震防災之宣導 效果。

地震之發生不可預期,地震造成之災害無法避免,為減輕地震災害對民眾財 產損失之風險,本基金將持續檢討及強化本保險制度,並配合政府政策積極辦理 各項宣導活動,加強民眾地震防災風險意識,提升本保險之投保率,以落實本保 險提供民眾基本財產保障之政策性目標。

董事長 陳明仁

On February 6, 2016, a 6.4-magnitude earthquake struck southern Taiwan with an epicenter located within Meinong District of Kaohsiung City, being the most destructive earthquake in Taiwan since the 921 Earthquake (also known as Chichi Earthquake) seventeen years ago. The Meinong (or 0206) earthquake took 116 lives, injured 550 people, and damaged over 60 buildings. Around 900 households lost their places to live.

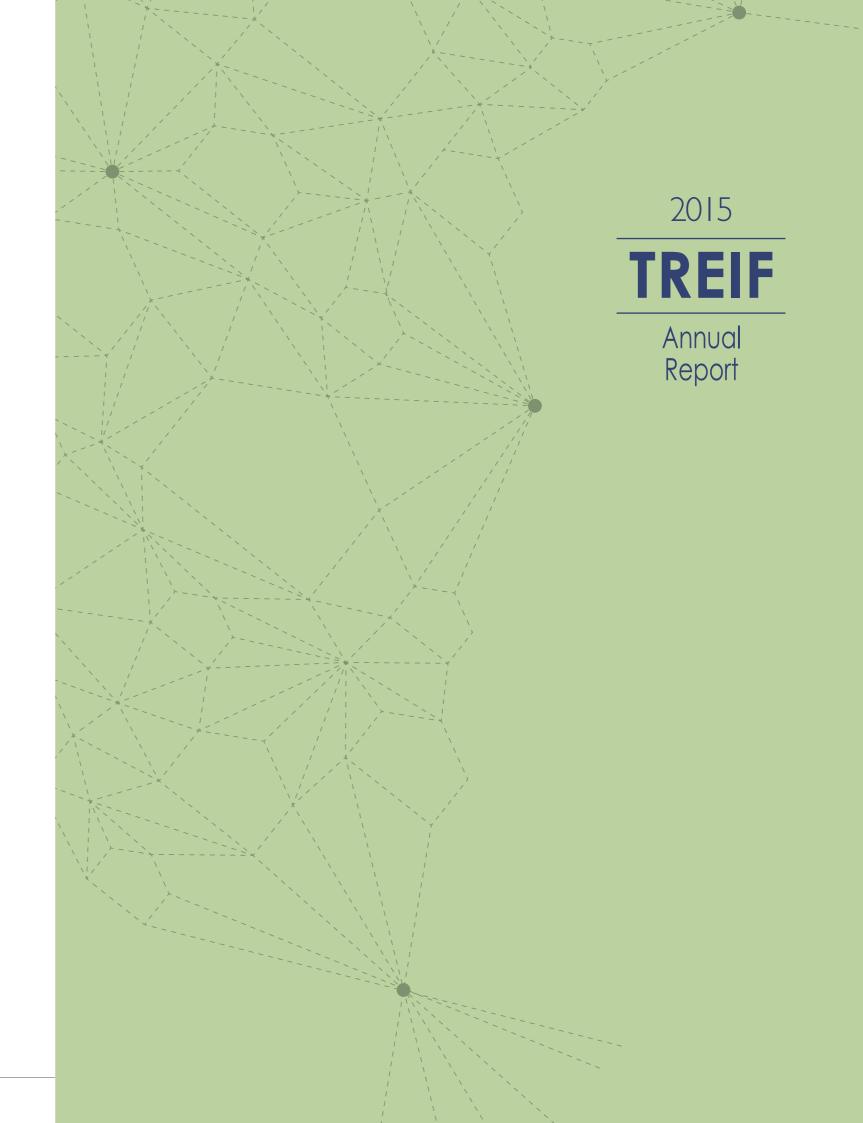
As a pivotal organization behind the nation's residential earthquake insurance scheme, Taiwan Residential Earthquake Insurance Fund (a.k.a. TREIF) organizes earthquake simulation drills every year to ensure that efficient claim services will be provided to the insured quickly after an earthquake incident. On February 6, 2016, immediately after the earthquake striking southern Taiwan, the staff of TREIF suspended taking Lunar New Year holidays and reported to work. TREIF activated the Emergency Response Plan to quickly grasp the impact of the earthquake, coordinated insurance companies to establish a joint claim service in disastrous areas in Tainan City, actively searched for policyholders located within the damaged buildings, and conducted residential earthquake insurance claim related matters. The first payment of contingent living expense in amount of NTD 200,000 was made to a policyholder on February 7, 2016. Furthermore, the first batch of claim payments was made to the insureds within eight days after the earthquake. 24 contingent living expense payments were made during the Lunar New Year holiday period, providing timely support to minimize impact to earthquake-affected households while fulfilling the purpose of this statutory insurance. Additionally, TREIF implements strict budget control. After putting forth great efforts in contract negotiation, the premium rates of excess of loss reinsurance contracts in 2015 dropped more than 17%, and further decreased by approximately 10% in 2016; more savings will be expected in 2017.

To strengthen the mechanism of residential earthquake insurance scheme, TREIF continues to review and study various topics and solutions in order to better fulfill the needs of the society. The key performances in 2015 included: (1) the Scheme: evaluating the feasibility of establishing a liability adequacy reserve system; (2) claim operation: studying the procedures of verifying claim payment and co-insurance pool loss recovery process, establishment of subrogation and fraud prevention mechanism for the insurance, and definition of total loss for various types of residential buildings and structures; reviewing claim operation related procedures; and planning and executing the 2015 claim simulation drills; (3) Regulations: reviewing the principals, guidelines, standards, and policy clauses of the residential earthquake insurance; (4) Promotion and Information System: implementing ISMS (Information Security Management System) and PIMS (Personal Information Management System); and evaluating the facility and environment of the TREIF's information system (including Virtual Machine).

To increase earthquake disaster reduction and risk awareness of Taiwan's residents, TREIF sponsored and organized many kinds of promotional activities. In 2015, we coorganized with Chiayi City and Taitung County governments the calligraphy, drawing, and writing contest among their elementary and junior high schools which drew participation from 138 school. TREIF also subsidized elementary and junior high schools in rural areas to visit the 921 Earthquake Museum to plant the earthquake disaster reduction concept deeply in the minds of our future generation. Moreover, TREIF set up an official Facebook account to attract bigger group of audience and enhance the effectiveness of earthquake disaster and risk reduction education by efforts of increasing interaction with the general public through regular Facebook postings and fun quiz activities.

Earthquakes are unpredictable, and losses caused by earthquake disasters are unavoidable. To reduce the risk of property losses from earthquakes destruction, TREIF will continue to dedicate our efforts to review and strengthen the Scheme and actively promote the Scheme and advocate earthquake disaster and risk reduction concept to residents of Taiwan in order to increase the take-up rate of the insurance and fulfill the goal of protecting the properties of the homeowners of Taiwan.

Chairman Ming Jen Chen



設立緣起

1999年9月21日發生於南投集集芮氏規模7.3的大地震(又稱921集集地震),舉國傷痛難忘。政 府因之形成建立地震保險共保體系、強化地震保險機制之共識,主管機關並劍及履及於1999年底提出 「保險法部份條文修正草案」,增訂保險法第一三八條之一,明訂保險業應承保住宅地震危險,並納 入建立地震危險承擔機制之規定。保險法修正條文於2001年7月9日公布,我國政策性住宅地震保險制 度之雛形於焉建立。

2001年11月30日主管機關依據保險法第一三八條之一規定,頒訂「住宅地震保險共保及危險承擔 機制實施辦法」,運作方式為經由各產物保險公司承保之住宅地震保險全數分予當時為國營之專業再 保險公司一中央再保險公司,該公司接受後再分予國內保險業、地震保險基金、國外再保險業及政府 等分層承擔,總危險承擔限額為新臺幣500億元,明確建構我國住宅地震保險危險承擔機制。

2002年4月1日起於財產保險業現有之住宅火災保險單下擴大保障住宅地震基本保險,每戶保險金 額最高新臺幣120萬元,採全國單一費率,每年每單保費新臺幣1,459元(自2009年4月1日起每年每單 保費調降為新臺幣1,350元)。保障範圍為承保住宅因地震震動或地震所引起之火災、爆炸、山崩、地 層下陷、滑動、開裂、決口或地震引起之海嘯、海潮高漲、洪水等事故導致之全損。

本保險制度實施初期之全損定義係指符合下列情事者:指經政府機關或專門之建築、結構、土木 等技師公會出具證明鑑定為不堪居住必須拆除重建或非經修建不能居住且補強費用為重建費用百分之 五十以上者。顯見初期採全損基礎係本於921集集地震慘痛經驗,採簡單易行、迅速理賠之方式,一旦 承保之住宅經評定為符合全損理賠標準時,承保公司除支付保險金額外,同時支付臨時住宿費用新臺 幣18萬元,立即讓受災民眾獲致適當理賠。



■ 2015.11.24 天災風險研討會長官與講者合影(金管會黃副主委天牧(右四))

Origins and Development

On September 21, 1999, a magnitude 7.3 earthquake, known as the "Chi-Chi" or "921" earthquake, struck Nantou County in central Taiwan, causing a great disaster which the people of Taiwan will never forget. The earthquake prompted the government to set up an earthquake Co-insurance system, and to build a consensus to bolster the earthquake insurance mechanism. At the end of 1999, the competent authority introduced amendments to Article 138-1 of the Insurance Act to include provisions on underwriting residential earthquake insurance by the insurers and establishment of a mechanism for assuming earthquake risk. The amendment of Insurance Act was promulgated on July 9, 2001, and a prototype of the Taiwan residential earthquake insurance scheme came into existence.

In accordance with Article 138-1 of the Insurance Act, the competent authority announced the "Enforcement Rules for Coinsurance and Risk Assumption Mechanism of Residential Earthquake Insurance" on November 30, 2001. The rules stipulate all residential earthquake insurance policies issued by non-life insurers to be ceded to Central Reinsurance Corporation (Central Re), a then state-owned reinsurer which in turn spread the risk to domestic non-life insurers, TREIF, foreign reinsurers and the government with the limit of total risk assumption set at NTD50 billion. The structure of the residential earthquake insurance risk assumption mechanism was thus established.

Effective from April 1, 2002, all residential fire insurance policies issued must expand the coverage to include the basic residential earthquake insurance, with a maximum sum insured of NTD1.2 million per household. The annual flat premium was set at NTD1,459 (reduced to NTD1,350 starting from April 1, 2009). The scope of coverage includes total loss of insured residential building due to earthquake shake, or fire, explosion, landslide, land subsidence, land movement, land fissure, land rupture, or tsunami, sea surge and flood caused by an earthquake or its seismic activity.

During the initial implementation stage of the residential earthquake insurance, "total loss" refers to any case in which the following condition is met: upon being determined and certified by a government agency or a professional association for architecture, building structure, civil engineering or alike that the residence is uninhabitable or the repair costs would equal or exceed 50% of the replacement cost. It was clear that, the initial adoption of a total loss system, which provides a simple implementation and quick indemnity, based on the bitter experience of the 921 Earthquake. Once the insured residence is assessed to meet the condition of total loss, the insurer will pay the full claim amount as well as a contingent living expense of NTD180,000 to the policyholder, thus appropriately compensating the earthquake victims in a timely manner.

On December 1, 2005, the competent authority promulgated the amended "Enforcement Rules for Coinsurance and Risk Assumption Mechanism of Residential Earthquake Insurance," adjusting the risk-bearing system from four tiers to two tiers. The first NTD2 billion of the NTD50 billion liability in the first tier was assumed by the residential earthquake Coinsurance Pool, and the remaining NTD48 billion liability in the second tier was assumed and/or ceded by TREIF. The maximum risk assumption of residential earthquake insurance was raised from NTD50 billion to NTD60 billion in 2007.



2005年12月1日主管機關修正發布「住宅地震保險共保及危險承擔機制實施辦法」,將危險承擔機制由四層改為二層。第一層新臺幣20億元,由住宅地震保險共保組織承擔,超過新臺幣20億元以上之新臺幣480億元,由地震保險基金承擔及分散。自2007年起將住宅地震保險之危險承擔限額,由新臺幣500億元調高至新臺幣600億元。

2007年7月18日保險法第一三八條之一修正,明訂地震保險基金負責管理主管機關建立之危險分散機制,並於2007年11月26日配合保險法修正將「住宅地震保險共保及危險承擔機制實施辦法」更名為「住宅地震保險危險分散機制實施辦法」。自2008年起,各產物保險公司承保之住宅地震保險業務須全部分予地震保險基金,地震保險基金接受所有危險後再予承擔及分散,建構完成現行住宅地震保險營運模式。

2008年12月30日主管機關修正發布「住宅地震保險危險分散機制實施辦法」,將住宅地震保險危險分散機制危險承擔限額自2009年起提高至新臺幣700億元。2012年1月1日起,住宅地震基本保險之保險金額調高為最高新臺幣150萬元,臨時住宿費用調高為新臺幣20萬元,費率仍為新臺幣1,350元。本保險保單條款中關於「地震」之定義修正為:我國或其他國家之地震觀測主管機關觀測並記錄之自然地震,以擴大因海嘯致本保險住宅建築物遭受損壞之保障範圍。另「全損」定義修正為:「全損」係指符合下列情事之一者:一、經政府機關通知拆除、命令拆除或逕予拆除;或二、經本保險合格評估人員評定、或經建築師公會或結構、土木、大地等技師公會鑑定為不堪居住必須拆除重建、或非經修復不適居住且修復費用為危險發生時之重置成本百分之五十以上者。

In accordance with revisions to Article 138-1 of the Insurance Act on July 18, 2007, TREIF was granted the responsibility for managing the risk spreading mechanism, which was set up by the competent authority. On November 26, 2007, under the amendment for the Insurance Act, the "Enforcement Rules for the Coinsurance and Risk Assumption Mechanism of Residential Earthquake Insurance" was renamed as the "Enforcement Rules for the Risk Spreading Mechanism of residential Earthquake Insurance". Since 2008, all residential earthquake insurance underwritten by non-life insurers has been ceded to TREIF, which then retained or transferred the risk, thus laying the foundation for the current residential earthquake insurance operation.

On December 30, 2008, the competent authority promulgated the revised "Enforcement Rules for the Risk Spreading Mechanism of Residential Earthquake Insurance," raising the risk assumption limit of the residential earthquake insurance's risk spreading mechanism to NTD70 billion starting in 2009. The maximum sum insured per subject matter insured under the residential earthquake insurance has been increased to NTD1.5 million effective from January 1, 2012, and the maximum contingent living expense has also been increased to NTD200,000. Meanwhile, the annual flat premium for the insurance maintains at NTD1,350 per policy. The definition of "earthquake" under the policy has been revised as natural earthquake, which is observed and recorded by the seismic observatory competent authority of Taiwan and other nations to extend to cover any loss or damage caused by the tsunami. The definition for the term of "total loss" has also been revised, referring to any of the following conditions - (1) The subject matter insured is demolished as informed, ordered or acted by the government agency; or (2) The subject matter insured has been assessed by a qualified adjuster, or by an association of professional architect, structural engineer, civil engineer, or geotechnical engineer, that the insured building has been assessed uninhabitable and in need of demolition and rebuilding; or has been assessed that it could be inhabitable after repairing and the repairing cost equals to or exceeds 50% of the replacement cost at the time when the insured risk occurs.

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為因應未來發生大規模地震或第二次地震時可能需重新安排不同起賠點之再保險保 障,有助於本保險制度順利運作,自2013年1月1日起危險分散機制各層危險承擔限額調整 如次:

第一層:新臺幣30億元危險部分,由住宅地震保險共保組織承擔。 第二層:新臺幣670億元危險部分,由地震保險基金承擔及分散, 並依下列方式辦理:

- (一)新臺幣530億元以下部分,由地震保險基金視業務需要及市場成本狀況,安排 於國內、外再保險市場或資本市場分散或自留,前述危險分散方式,應報經主 管機關備查;修正時,亦同。
- (二)超過新臺幣530億元至新臺幣670億元部分,仍由政府承擔,損失發生時由主管 機關編列經費需求報請行政院循預算程序辦理。

第二層 地震保險基金 新台幣 670 億元 -

第一層 住宅地震保險共保組織 新台幣 30 億元

政府 新台幣 140 億元

地震保險基金安排於 國內、外再保險市場 或資本市場分散或自留

新台幣 530 億元

地震保險基金 新台幣 160 億元

再保險市場 新台幣 200 億元

地震保險基金 新台幣 170 億元

In preparation for any future large-scale earthquake and / or second earthquake which may require the reinsurance protection of different trigger points as well as in making sure the smooth operation of the Scheme, the risk liabilities for each tier have been adjusted, effective from January 1, 2013, as follows:

Tier 1: NTD3 billion undertaken by the Co-insurance Pool.

Tier 2: NTD67 billion undertaken by TREIF. This Portion of the risk should be assumed or spread in the following manner:

- 1. The portion equal and up to NTD53 billion shall be spread in domestic, and/or overseas reinsurance markets and/or capital markets and/or retained by TREIF in accordance with business needs and/or market costs. The aforementioned risk spreading mechanisms shall be reported to the competent athority for recordation. The preceding provision also applies to any subsequent changes thereto.
- 2. The portion over NTD53 billion and up to NTD67 billion shall be assumed by the government. When a loss occurs, the competent authorities shall prepare a funding requirement report and submit it to the Executive Yuan, which shall handle funds appropriation in accordance with the budget process.

Tier 2 TREIF NTD **67** billion Tier 1

Residential Earthquake Co-insurance Pool

NTD 3 billion

Government NTD 14 billion

This portion of the risk should be undertaken by TREIF or spread in domestic/overseas reinsurance markets and/or capital markets

NTD **53** billion

TREIF

NTD 16 billion

Reinsurance Markets

NTD 20 billion

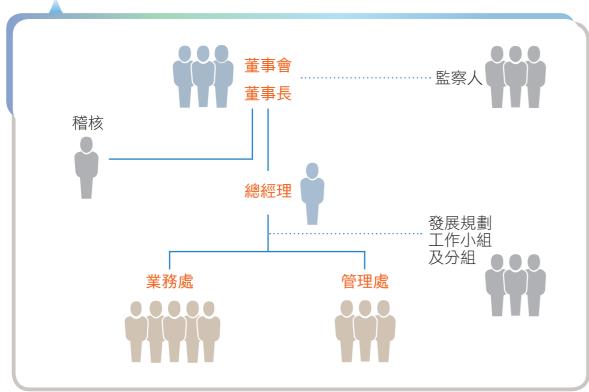
TREIF

NTD 17 billion

組織概況

財團法人住宅地震保險基金(以下簡稱地震保險基金)係屬公益財團法人,不具營利性質,於 2002年1月17日正式成立,成為繼日本及土耳其之後,亞洲第三個由國家主導而成立之政策性住宅地震 保險機構。

組織架構圖



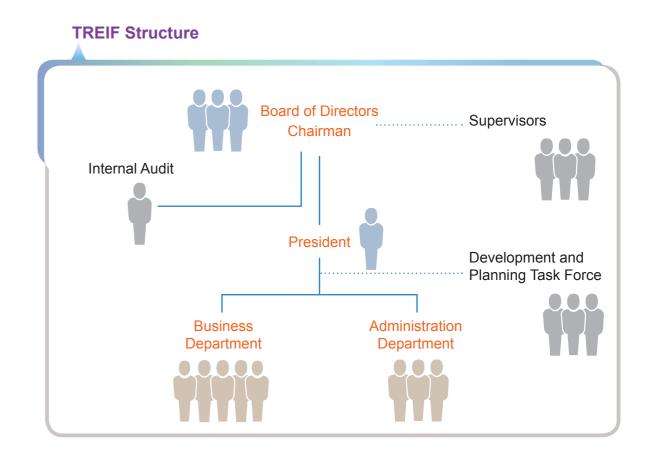
◆ 董事會

董事會為地震保險基金最高決策單位,董事長為地震保險基金之代表人,董事會由董事十一人組 成,均由主管機關自下列人員聘任之:

- ●目的事業主管機關代表三人。
- ●財政部國庫署代表一人。
- ●目的事業主管機關指定之專家學者三人。
- 住宅地震保險共保組織會員代表三人。
- 地震保險基金總經理。

Organization

Taiwan Residential Earthquake Insurance Fund (TREIF) is a public service, non-profit organization officially established on January 17, 2002. It is the third national residential earthquake insurance organization initiated by government in Asia, following the examples of Japan and Turkey.



Board of Directors

The Board of Directors is TREIF's highest decision-making body. The chairman is the legal representative of TREIF. The Board of Directors comprises 11 members appointed by the competent authority.

- Three representatives from the competent authority.
- One representative from the National Treasury Agency, Ministry of Finance.
- Three experts / scholars.
- Three representatives from the Residential Earthquake Co-Insurance Pool.
- President of TREIF.

◆ 監察人

地震保險基金目前設置監察人三人,由目的事業主管機關聘任,監督地震保險基金之業務及財務 狀況。

◆ 稽核

地震保險基金為健全業務發展、確保財務及管理資訊正確、完整,特制定「財團法人住宅地震保 險基金內部控制及稽核制度實施辦法」,設隸屬董事會之內部稽核,以超然獨立之精神負責稽核業務之 規劃及執行,並定期評估各單位自行查核辦理績效。

◆ 住宅地震保險制度發展規劃工作小組

2008年3月成立住宅地震保險制度發展規劃工作小組,其下設危險分散與費率、承保理賠與法制 及資訊統計與教育推廣等三個工作分組,協助地震保險基金檢討改善現行保險制度,強化地震保險基金 中樞組織之功能。該工作小組由地震保險基金總經理擔任總召集人,工作小組委員由地震保險基金延聘 產、官、學界之專家學者及地震保險基金人員組成。

◆ 業務範圍

依「財團法人住宅地震保險基金捐助章程」第七條規定地震保險基金之業務範圍如下

- ●辦理住宅地震保險之再保險、危險承擔與分散事宜。
- 收取住宅地震保險分進之純保險費、附加費用收入及資金運用收益。
- 依據財源籌措計畫向國內、外貸款或融資。
- 處理與前三款有關之其他相關業務。
- 辦理目的事業主管機關指定事項。
- 辦理符合本基金設立目的之公益活動。
- 其他依保險法或其他法令規定地震保險基金得辦理之業務。

Supervisors

TREIF has three supervisors who are designated by the competent authority to supervise the business operation and financial affairs of TREIF.

♦ Internal Audit

In accordance with the "Enforcement Rules for Internal Control and Audit Systems of the Taiwan Residential Earthquake Insurance Fund," an Internal Audit has been established under the Board of Directors to ensure the sound development of TREIF's operations and guarantee the accuracy and integrity of financial and administrative information. The Internal Audit is responsible for auditing the business planning and execution of each department, as well as periodically appraising the results of the self-assessments performed by each department in an aloof, independent manner.

◆ Residential Earthquake Insurance Scheme Development and Planning Task Force

The Residential Earthquake Insurance Scheme Development and Planning Task Force was established in March 2008 to assist TREIF in improving the existing scheme and strengthening its core functions. It was divided into three subcommittees: Risk Spreading and Premium Rate Subcommittee, Underwriting, Claim and Legal Subcommittee, and IT, Statistics and Educational Promotion Subcommittee. The president of TREIF serves as convener of the task force, and the members are comprised of staffs of TREIF as well as experts and scholars from the private, public and academic sectors.

◆ Scope of Business

In accordance with Article 7 of TREIF Articles of Incorporation, the scope of TREIF's business is as follows:

- Managing reinsurance, risk assumption and risk spreading for the residential earthquake insurance.
- Receiving pure premium ceded from residential earthquake insurance, loadings and revenue by this insurance and proceeds derived from fund utilization.
- Obtaining domestic or overseas loans in accordance with the financing plans.
- Handling other business in relation to the preceding three subparagraphs.
- Taking care of matters assigned by the competent authority.
- Organizing public welfare activities that are in line with the goals of TREIF.
- Conducting business that TREIF is permitted to undertake in accordance with the Insurance Act or other laws and regulations.

運作中樞

2001年11月30日主管機關頒訂「財團法人住宅地震保險基金捐助章程」及「財團法人住宅地震保 險基金管理辦法」賦予地震保險基金成立之法令依據。地震保險基金成立初期,為節約支出俾快速累積 基金規模,委由中央再保險公司經營管理並兼辦所有相關業務。

住宅地震保險實施初期,中央再保險公司為住宅地震保險制度之經理人,負責共保事務及國外再 保安排,對住宅地震保險初期之建制作出貢獻。2002年中央再保險公司移轉民營後,考量住宅地震基 本保險係政策性保險,中樞組織當由非營利機構擔任,且鑑於當時住宅地震保險制度相關法規並未明定 住宅地震保險制度之中樞組織,因此承擔機制之國內產險公司或國外再保公司倘發生信用危險,致無法 支付保險費或再保賠款無法攤回時,將影響本保險制度之順利運作,並損及被保險人權益,主管機關乃 於2005年12月1日修正發布「住宅地震保險共保及危險承擔機制實施辦法」,將地震保險基金定位為住 宅地震保險制度之中樞組織,並積極推動地震保險基金之獨立運作。

2006年7月1日地震保險基金正式獨立運作,地震保險基金之角色由單純之風險承擔與分散,轉換 為制度管理之中樞組織,獨立運作後除由原中央再保險公司兼辦人員轉任外並延聘專職人員承辦相關業 務,負責住宅地震保險承保、理賠機制之建立與改善、共保業務之處理、再保險安排、業務宣導、與合 格評估人員及專業技師等之訓練及講習等事項。鑑於住宅地震保險為政策性保險,制度改革尤與民眾權 益息息相關,因之相關議題之決策允官周延縝密,乃於2008年3月成立住宅地震保險制度發展規劃工作 小組,延聘產、官、學界之專家學者連同地震保險基金人員,以召開會議方式逐一檢討改善現行地震保 險制度,並提供主管機關政策建言,以強化地震保險基金中樞組織之功能,俾符合主管機關、保險業界 與投保大眾之殷切期待。



■ 2015.12.18 住宅地震保險理賠機制模擬演練檢討會暨頒獎典禮(保險局施副局長瓊華(前排中)與得獎人員合照)

Pivotal Role in the Taiwan Residential **Earthquake Insurance Scheme**

On November 30, 2001, the competent authority announced "Taiwan Residential Earthquake Insurance Fund Articles of Incorporation", and "Regulations Governing Taiwan Residential Earthquake Insurance Fund", laying a legal foundation for the establishment of TREIF. To save cost and accelerate the accumulation of fund, Central Re was entrusted to manage the fund and handle all of its related business during the initial stage.

During the initial implementation stage of the Scheme, Central Re was designated as the scheme manager, responsible for managing the Co-insurance Pool and overseas reinsurance placement. It contributed greatly to the residential earthquake insurance scheme. Central Re was privatized in 2002. Considering that the residential earthquake insurance is a statutory insurance, it ought to be managed by a non-profit organization to avoid the possible credit risks that private insurers or reinsurers face, which could hinder the implementation of the Scheme and sabotage policyholders' rights. Hence, on December 1, 2005, the competent authority revised and promulgated "Enforcement Rules for the Coinsurance and Risk Assumption Mechanism of Residential Earthquake Insurance" to designate TREIF as the pivotal role of scheme manager and actively to promote the operational independence of TREIF.

As the result, TREIF assumed the pivotal role in Taiwan's residential earthquake insurance scheme and officially began independent operations on July 1, 2006. Its function no longer limited to risk assumption and risk spreading, but to cover all affairs relating to the scheme, including the establishment and improvement of underwriting and claims settlement mechanism, coinsurance management, reinsurance placement, business promotion, and training for qualified adjusters and professional technicians. To support the growing responsibility, relevant staffs were transferred to TREIF from Central Re and additional employees were recruited. Considering that the residential earthquake insurance is a statutory insurance, any reform of the scheme could significantly impact the public interest, and therefore, any future decision making must be thoroughly and meticulously evaluated. Consequently, TREIF established the Residential Earthquake Insurance Scheme Planning and Development Task Force in March 2008 to assist TREIF in formulating relevant policy plans for the competent authority's consideration. Combining the efforts of experts and scholars that TREIF invited from private, public, and academic sectors together with its staffs, the Task Force convened meetings to probe into improvement plans for each and individual items under the scheme. The Task Force strengthens the functionality of TREIF to fulfill the expectations of the competent authority, the insurance industry and the policyholders.

業務概況

■ 承保作業

◆ 有效保單及投保概況

自2002年住宅地震保險開辦以來,住宅地震保險業務即穩定成長,截至2015年底止,有效保單件 數約271萬件,以全國住宅總戶數8,409,079戶計算,投保率為32.19%,件數較前一年成長2.63%。歷 年來住宅地震保險有效保單件數、簽單保費收入及成長率詳如下表。

▲ 住宅地震保險有效保單件數及簽單保費收入

單位:新臺幣仟元

		中区 初至17171
年度	有效保單件數	簽單保費收入
2002(4月~12月)	455,498	661,231
2003	859,213	1,242,788
2004	1,173,082	1,702,959
2005	1,447,545	2,101,527
2006	1,672,043	2,425,076
2007	1,872,195	2,722,298
2008	2,029,369	2,947,698
2009	2,168,528	2,951,981
2010	2,294,738	3,057,970
2011	2,390,202	3,193,562
2012	2,459,152	3,202,554
2013	2,553,337	3,336,938
2014	2,637,811	3,463,141
2015	2,707,256	3,523,412

註: 1.2009年4月1日起每單保費由1,459元調降為1,350元。

2. 2012年1月1日起保險金額由120萬元調高為150萬元。

■ Underwriting Operation

Business Overview

♦ Overview of Policies in Force and Insurance Take-Up rate

Since the launch of the residential earthquake insurance in 2002, it has experienced steady growth. At the end of 2015, the total policies in force reached 2.71 million, which accounted for 32.19% of the total national households of 8.41 million, up by 2.63% when compared with previous year. A more detailed data of the written premium income and policies in force over the past years are listed in the following charts:

Taiwan Residential Earthquake Insurance Policies in Force and Written Premium

Unit: NTD1,000

Year	Policies In Force	Written Premium Income
2002 (April ~ December)	455,498	661,231
2003	859,213	1,242,788
2004	1,173,082	1,702,959
2005	1,447,545	2,101,527
2006	1,672,043	2,425,076
2007	1,872,195	2,722,298
2008	2,029,369	2,947,698
2009	2,168,528	2,951,981
2010	2,294,738	3,057,970
2011	2,390,202	3,193,562
2012	2,459,152	3,202,554
2013	2,553,337	3,336,938
2014	2,637,811	3,463,141
2015	2,707,256	3,523,412

Note: 1. Effective from April 1, 2009, the annual flat premium has been reduced from NTD1,459 to NTD1,350 per policy.

2. Effective from January 1, 2012, the maximum sum insured has been increased from NTD1.2 million to NTD1.5 million per policy.



◆ 累積責任額及投保率

截至2015年12月31日止住宅地震 保險全國累積責任額達新臺幣4兆4,554 億元,累積責任額較高區域為臺北市、 新北市(含基隆)、桃園、新竹、臺中 及高屏等都會區;投保率以新竹以北地 區及臺中較高,全國投保率最高區域為 新竹,達39.96%。

住宅地震保險累積責任額及投保率

地區	累積責任額 (新臺幣元)	累積責任額 比率(%)	有效保單 件數(件)	住宅戶數 (戶)	投保率
1 臺北市	567,337,906,734	12.73%	348,182	939,296	37.07%
1.1 新北市、基隆	1,087,338,154,453	24.40%	657,005	1,731,501	37.94%
2 桃園	507,922,013,323	11.40%	304,629	779,971	39.06%
3 新竹	226,420,951,961	5.08%	137,852	344,968	39.96%
4 苗栗	75,148,904,332	1.69%	45,531	172,271	26.43%
5 臺中	581,753,677,254	13.06%	352,372	983,109	35.84%
6 南投	54,466,740,100	1.22%	34,818	163,944	21.24%
7 彰化	127,565,185,752	2.86%	76,988	396,261	19.43%
8 雲林	60,579,397,015	1.36%	36,312	219,234	16.56%
9 嘉義、臺南	394,789,068,505	8.86%	240,428	945,858	25.42%
10 高雄、屏東、澎湖	613,401,022,448	13.77%	375,655	1,346,436	27.90%
11 花蓮、臺東	76,426,807,302	1.72%	47,024	198,004	23.75%
12 宜蘭	76,216,616,470	1.71%	46,727	167,399	27.91%
13 金門、其他列嶼	6,093,387,699	0.14%	3,733	20,827	17.92%
合計	4,455,459,833,348	100.00%	2,707,256	8,409,079	32.19%



Cumulative Liability & Insurance Take-Up Rate

As of December 31, 2015, the cumulative liability of Taiwan's residential earthquake insurance amounted to NTD 4.4554 trillion. Cities with higher amount of cumulative liability were metropolitan cities like Taipei City, New Taipei City (including Keelung), Taoyuan, Hsinchu, Taichung, and Kaohsiung-Pintung. The take-up rates were higher in cities north of Hsinchu and in Taichung. The highest take-up rate of 39.96% was reported in Hsinchu.

Taiwan Residential Earthquake Insurance Cumulative Liability & Take-up Rates

CRESTA Zone	Cumulative Liability (NTD)	Ratio (%)	Policies in Force	Households	Take-Up Rate(%)
1 Taipei City	567,337,906,734	12.73%	348,182	939,296	37.07%
1.1 New Taipei City, Keelung	1,087,338,154,453	24.40%	657,005	1,731,501	37.94%
2 Taoyuan	507,922,013,323	11.40%	304,629	779,971	39.06%
3 Hsinchu	226,420,951,961	5.08%	137,852	344,968	39.96%
4 Miaoli	75,148,904,332	1.69%	45,531	172,271	26.43%
5 Taichung	581,753,677,254	13.06%	352,372	983,109	35.84%
6 Nantou	54,466,740,100	1.22%	34,818	163,944	21.24%
7 Changhua	127,565,185,752	2.86%	76,988	396,261	19.43%
8 Yuanlin	60,579,397,015	1.36%	36,312	219,234	16.56%
9 Chiayi, Tainan	394,789,068,505	8.86%	240,428	945,858	25.42%
10 Kaohsiung,Pintung,Penghu	613,401,022,448	13.77%	375,655	1,346,436	27.90%
11 Hualien, Taitung	76,426,807,302	1.72%	47,024	198,004	23.75%
12 Yilan	76,216,616,470	1.71%	46,727	167,399	27.91%
13 Kinmen and other isles	6,093,387,699	0.14%	3,733	20,827	17.92%
Total	4,455,459,833,348	100.00%	2,707,256	8,409,079	32.19%

◆ 辦理住宅地震保險業務稽查

為期住宅地震保險共保組織會員公司能確實遵循住宅地震保險相關規範辦理本保險業務,地震保 險基金依據「住宅地震保險業務稽查作業規定」,成立稽查督導小組、選定稽查公司、擬定稽查底稿、 通知稽查、執行稽查、撰寫稽查報告書,並將稽查意見、缺失及缺失改善情形製成稽查報告書後,函報 主管機關。

■ 理賠作業

◆ 研議賠案彙整審查與共保攤賠作業程序

- (一)為於大規模地震發生時,儘速攤付再保賠款予產險公司,減輕其資金調度的壓力,參酌日 本311地震賠款賠付趨勢,研議本案。
- (二)經檢視下列現行相關規範有修正之必要:
 - 1. 明定賠付證明文件之內容。
 - 2. 建議增訂事後抽查稽核規定。
 - 3. 修正現金攤賠帳單之應收款項與應付款項為不互抵,加速再保賠款攤賠速度,以減輕產 險公司資金調度的壓力。

◆ 研議建制本保險代位追償及防騙機制

- (一)建制本保險防騙機制:
 - 1. 檢視本保險理賠程序,依據「預防」、「偵測」、「調查」、「制裁」及「檢討」,建 制本保險防騙機制。
 - 2. 後續辦理事項重點如下:
 - (1)簽單公司部分:將保險詐欺納入簽單公司「理賠相關作業要點」之檢核項目及員工 教育訓練教案中。
 - (2) 地震保險基金部分:
 - a. 全損理賠案件增列於資料庫、
 - b. 加強保險詐欺防治宣導,並於理賠後對可疑案件進行稽查、
 - c. 發函簽單公司請依前揭事項(1)辦理。

Auditing of Residential Earthquake Insurance Business

To ensure that the Co-insurance Pool members are complying with the rules and guidelines related to the residential earthquake insurance when operating the business, TREIF formed an auditing team in accordance with the "Operating Rules for the Auditing of Residential Earthquake Insurance Business" to identify the company to be audited, develop an audit plan, implement the audit, and prepare an audit report containing audit opinions and improvement plans to submit to the competent authority.

■ Claim Operation

♦ Studying the procedures of verifying claim payment and co-insurance pool loss recovery process

- 1. To alleviate insurance companies' financial pressure when a major earthquake disaster occurs, a study was conducted by reference to the claim payment curve of 2011 Tohoku earthquake on how to expedite reinsurance claim payments to insurance company.
- 2. The study found the necessity to revise the following stipulations:
- (1) Specifying the documents required for cash-call settlement.
- (2) Suggesting to add new audit rules to allow spot-checking claim cases after settlement.
- (3) Removing current restriction on offsetting claim receivable by claim payable to expedite claim process and alleviate financial pressure of non-life insurance companies.

Subrogation and Fraud Prevention Mechanism

Establishing Fraud Prevention Mechanism:

- 1. Reviewing the claim procedures of the Scheme, and establishing fraud prevention mechanism from "prevention", "detection", "investigation", "sanction," and "review" perspective.
- 2. Key items to implement:
- (1) For insurance companies: to include fraud prevention check list in the companies' claim settlement related procedures as well as in staff training programs.
- (2) For TREIF: a). to add a new category "total loss claim cases" in the database; b). to advocate fraud prevention awareness and conduct audit on suspicious settled claim cases; c). to issue memorandum to insurance companies requiring them to roll out changes aforementioned.

Subrogation mechanism of the Scheme:

1. Subrogation related stipulation stated in Article 53 of the Insurance Act is applicable to the residential earthquake insurance scheme. However in order to ensure that the subrogation mechanism of the scheme is in consistency with policy clause of residential fire insurance and residential third party liability insurance, a specific subrogation clause for the scheme must be added when revising policy clauses in the future.

(二)本保險代位追償機制:

- 1. 保險代位為保險法第53條規範之制度,本保險亦有所適用,為使與住宅火災保險及住宅 第三人責任基本保險條款一致,嗣後保單條款需修正時,併同增訂住宅地震基本保險代 位條款。
- 2. 實務執行面倘遇有代位求償可能之案件由地震保險基金與保險公司共同召開會議討論。

◆ 研議各類型住宅建築物全倒之定義

- (一)為使現行「住宅地震保險全損評定及鑑定基準」中受損建築物「不堪居住必須拆除重建」 之定義更加具體清楚,爰討論修正其定義如下:
 - 1. 建築物整體傾倒或塌陷達建築物建築面積1/2以上。
 - 2. 建築物任一柱、梁、承重牆損壞達4級以上,且建築物整體傾斜率或建築物部份樓層以上傾斜率達1/30以上。
 - 3. 建築物基地地面以上第一層遭砂石完全掩埋。
- (二)修正「住宅地震保險全損評定及鑑定基準」。
- (三)因違建加蓋樓層,建材及耐震能力不及一般住宅建築物,現行「住宅地震保險全損評定及鑑定基準」,受損最嚴重樓層之評定及鑑定應排除違建加蓋樓層。

◆ 辦理理賠機制模擬演練

為有效瞭解大地震後地震保險基金執行緊急應變計畫相關工作之情形,並與簽單公司依據本保險 各理賠作業處理程序,辦理各項理賠相關工作,利用地震保險基金建置之「住宅地震保險地理資訊系統」、「住宅地震保險調度理賠管理資訊系統」調度合格評估人員及災區聯合理賠服務中心進駐人員, 測試其是能否有隨時接受徵調之警覺及能依徵調通知確實回報、實地報到與任務分配及災損評定等情形 之模擬演練,演練內容包括:

- (一)情境狀況一:地震保險基金,利用「住宅地震保險調度理賠管理資訊系統」(以下簡稱調度系統)發送全臺合格評估人員及進駐人員調度事件之通報回報演練,進行系統壓力測試。
- (二)情境狀況二:假設臺灣南部梅山斷層錯動發生芮氏規模7.1大地震,地震保險基金依住宅地 震保險理賠標準作業程序進行各項作業之模擬演練如下:
 - 1. 第一階段: 災情彙整/會議模擬演練 主管機關、簽單公司及地震保險基金依本保險理賠相關作業程序進行一系列演練事宜; 如依緊急應變計畫進行應變措施、災情蒐集彙整、召開內部會議、緊急會議及理賠中樞 小組會議等。

2. In event of any potential subrogation case arising, TREIF and insurance companies shall convene meetings to discuss relevant issues if putting subrogation in practice.

◆ Definition of Total Loss for Various Types of Residential Buildings

- 1. To clarify and specify the definition of damaged insured building being assessed as "uninhabitable and in need of demolition and rebuilding" under "Criteria of Total Loss of Assessment for the Residential Earthquake Insurance", the following amendments shall be made:
- (1) The leaning and collapsing of the building is affecting more than 1/2 of the building's construction area;
- (2) Any of column, beam, and structure wall of the building is damaged equivalent to or beyond "damage level 4" and the entirety or partial floors of the building is leaning at inclination equivalent to or more than 0.0333;
- (3) The first floor above ground level of a building site is completely covered by gravel.
- 2. To amend the "Criteria of Total Loss of Assessment".
- 3. To revise the "Criteria of Total Loss of Assessment", excluding floors built without permit in the assessment for the most badly damaged floor because those floors usually contain building materials with lower quality than floors built with permit and have lower seismic resistance capacity.

♦ Claim Simulation Drill

Claim simulation drills were conducted in order to understand how TREIF carry out the Emergency Response Plan and work together with underwriting companies on various claim related operations in accordance with the guidelines and stipulations in the "Standard Procedures for Claim Settlements of the Residential Earthquake Insurance." During the drill, TREIF utilized "Residential Earthquake Insurance Geographic Information System" and "Mobilization and Claim Settlements Management Information System for the Residential Earthquake Insurance" to mobilize qualified adjusters and joint claim service center stationed personnel, testing whether qualified adjusters and joint claim service center stationed personnel are vigilant and ready to respond to mobilization requests, to report for duty, to divide work, and to assess damages. The simulation drills covered the following:

Scenario 1: TREIF used "Mobilization and Claim Settlements Management Information System for the Residential Earthquake Insurance" to send mobilization request to qualified adjusters and stationed personnel, testing receivers response rate and conducting system's stress test.

Scenario 2: Under the assumption that an earthquake of 7.1 magnitudes hit northern Taiwan due to dislocation of Meishan Fault in southern Taiwan, TREIF conducted a simulation drill according to the "Standard Procedures for Claim Settlements of the Residential Earthquake Insurance."

Stage 1: information gathering / simulated meetings.

The competent authority, insurance companies, and TREIF carried out a series of task drills according to the operation procedures related to claim settlement of the residential earthquake insurance, for examples: implementing

2. 第二階段:通報回報

本階段演練依理賠中樞小組會議結論,利用調度系統調度合格評估人員與進駐人員;並設立災區緊急服務中心。

- 3. 第三階段:實地報到及狀況演練/成立災區聯合理賠服務中心及理賠服務中心演練本階段演練依災情狀況及理賠中樞小組會議結論成立一處災區聯合理賠服務中心,各簽單公司就近於災區之總、分公司或辦事處成立「災區理賠服務中心」以主動積極服務其受震災影響之保戶;受徵調之進駐人員與合格評估人員依理賠作業程序,進行各項程序演練。
- 4. 第四階段:災損評定及全損評定資訊系統操作 於嘉義市災區聯合理賠服務中心設置模擬災損建築物模型,由合格評估人員進行災損建 築物損失評定、並將評定結果輸入全損評定及鑑定資訊系統之實地演練。

(三)2015年度模擬演練目標達成情形

- 1. 於狀況一及狀況二第二階段,利用調度理賠管理資訊系統動員合格評估人員及進駐人員,其均能在不預警情況下回覆率達100%。調度資訊系統壓力測試運作正常。
- 2. 各家簽單公司皆積極協助並配合狀況二第一階段各項演練,重點概要內容分述如下:
- (1) 理賠中樞小組轄下三分組成員皆積極執行其應辦理事項。
- (2)簽單公司於緊急會議中說明其內部緊急應變計畫。
- (3)各簽單公司理賠窗口、進駐人員及合格評估人員均有隨時接受調度之警覺,並積極配合通報之回覆及實地報到。
- 3. 狀況二第三階段合格評估人員及進駐人員實地報到比率達100%。
- 4. 災區聯合理賠服務中心、理賠服務中心順利進行:
- (1)簽單公司於各自災區辦公處所成立災區理賠服務中心,並模擬震災本保險理賠作業
- (2) 災區聯合理賠服務中心正、副主任說明服務中心運作事宜,包括任務分派、人員出勤 及更替、費用申請及歸墊等規定。
- (3) 災區聯合理賠服務中心正、副主任及其組員合格評估人員報到、對其進行行前說明, 包括災損情況、交通狀況、村里長聯絡資訊、裝備介紹及發放損失評估表等。
- 5. 建築物模型災損評定作業之合格評估人員報到率達100%,且對於評定作業之流程與本保險全損評定及鑑定資訊系統操作使用有一定之熟稔度。

response measures based on the emergency response plan, gathering information about the disaster, and convening internal meeting, emergency meeting, and central claim settlement task force meeting.

Stage 2: Simulation of mobilization request and the establishment of emergency service centers in disastrous area.

To follow the conclusions drawn by the central claims task force meeting, mobilizing qualified adjusters and stationed personnel by using the "Mobilization and Claim Settlements Management Information System for the Residential Earthquake Insurance" as well as establishing emergency service centers in disastrous area.

Stage 3: Report for Duty and Preparedness Drill / Simulation Drill for Setting Up Joint Claim Service Center and Special Claim Service Desks.

In the stage 3 of the simulation drill, a Joint Claim Service Center in Disastrous Areas was established according to the post-disaster situation and the conclusion drawn by the central claims task force meeting. Insurance companies also set up special claim service desks in their headquarters or branch offices near by the disastrous area to quickly and actively serve earthquake-affected policyholders. Mobilized qualified adjusters and stationed personnel rehearsed operating procedures following the Standard Procedures for Claim Settlements of the Residential Earthquake Insurance.

Stage 4: Loss Assessment / the Operation of the Claim Evaluation System.

Setting up a model of disaster damaged building module in the Joint Claim Service Centers in Disastrous Areas of Chiayi City, for qualified adjusters to conduct loss assessment on the building module and enter the assessment results into the "Total Loss Claim Evaluation System."

The Results of 2015 Simulation Drills

- 1. The response rate of qualified adjusters and stationed personnel reached 100% when Mobilization and Claim Settlements Management Information System was used in scenario 1 and stage 2 of scenario 2 to mobilize drill participants. The stress test result indicated that the Mobilization and Claim Settlements Management Information System for the Residential Earthquake Insurance was working properly.
- 2. All insurance companies actively participated and supported the drill and followed the instructions in stage 1 of scenario 2. The key activities covered in the drill are as follows:
- (1) All members of the three sub-groups under the central claim settlement task force proactively carried out the tasks assigned.
- (2) Delegates from insurance companies explained their internal emergency response plan at the emergency meeting.
- (3) Insurance companies' claim service staff, stationed personnel, and qualified adjusters vigilantly stood by to receive mobilization request notice, quickly replied to the notice and reported for duty.
- 3. Qualified adjusters and stationed personnel's report-for-duty rate reached 100% in the stage 3 of scenario 2 drill.
- 4. Smooth Running of the Joint Claim Service Centers of Disastrous Areas and Special Claim Service Desks:
- (1) Insurance companies formed special claim service desks in their offices near by the earthquake-affected area and conducted a simulation drill of residential earthquake insurance claim settlement procedures.

■ 辦理住宅地震保險超額賠款再保險安排

有關2015年度住宅地震保險危險分散機制之風險分散,地震保險基金辦理再保分出,安排承擔限額超過新臺幣200億元之100億元、以及超過新臺幣300億元之100億元之兩層超額賠款再保合約續約。經努力議價,極力與再保人爭取對地震保險基金最優惠之價格,加上國際巨災市場疲軟,兩層再保安排共節省再保費支出新臺幣近億元。

■ 研究發展

◆ 住宅地震保險制度發展規劃工作小組

2015年住宅地震保險制度發展規劃工作小組召開7次會議,確認其轄下各分組所擬各項重要工作 內容與進度:

危險分散與費率分組

危險分散與費率分組召開4次會議,完成評估建置負債適足準備機制之可行性、住宅地震保險風險 評估模型更新強化與保費計算方式檢討等工作項目,會議重要結論如下:

1. 考量現行本保險已有提存未滿期保費準備金、賠款準備金與特別準備金之規定,並訂有純保費 餘額全數提存為特別準備金之提存機制。本保險共保組織認受之業務,應無需另行建置負債適 足準備之機制。



■2015 年本基金與嘉義市府合辦地震防災教育藝文競賽頒獎典禮(嘉義市涂市長醒哲(前排右三)、陳董事長明仁(前排右二))

- (2) The head and the deputy of the Joint Claim Service Centers of Disastrous Areas explained the operations of the temporary claim service office, including task assignments, stationed personnel's shifts, and rules for expense application and reimbursement.
- (3) The head, the deputy, and the stationed personnel of the Joint Claim Service Centers of Disastrous Areas assisted qualified adjusters report for duty and gave them an orientation before adjusters hitting the road to the damaged sites, providing information such as the scale of the disaster, road and traffic conditions, contact information of the town or village leaders, introduction of the equipment, and loss assessment forms.
- 5. The report-for-duty rate of qualified adjusters for loss assessment of disaster damaged building module reached 100%. All qualified adjusters were rather familiar with the assessment process and the Total Loss Claim Evaluation System.

■ Management of Reinsurance Placement for Excess of Loss for the Residential Earthquake Insurance

Based on the Risk Spreading Mechanism of Residential Earthquake Insurance, in 2015, TREIF transferred risk to reinsurance market by renewing excess of loss reinsurance contract in two layers, namely the layer of NTD 10 billion in excess of NTD 20 billion and the layer of NTD 10 billion in excess of NTD 30 billion.

In the light of the softening catastrophe insurance market and successful negotiations with reinsurance companies, TREIF was able to save nearly NTD100 million premium in total for the two layers of reinsurance contracts.

■ Research & Development

◆ Residential Earthquake Insurance Scheme Development and Planning Task Force

In 2015, the Residential Earthquake Insurance Scheme Development and Planning Task Force convened 7 meetings to validate the major tasks that each subcommittee had planned and the progress of each task.

The Risk Spreading and Premium Rate Subcommittee

The Risk Spreading and Premium Rate Subcommittee convened 4 meetings to accomplish the following tasks: completing the feasibility assessment for establishing liability adequacy reserve system, enhancing the TREIF Earthquake Risk Assessment model (TREIF-ERA), and reviewing premium calculation formula. Important meeting conclusions include the followings:

- 1. Considering that there are already stipulations in place governing unearned premium reserve, loss reserve and special reserve, and a mechanism requiring insurance companies to set aside pure premium balance as special reserve, the study found that it is unnecessary to establish a liability adequacy reserve system for the residential earthquake insurance.
- 2. In response to Taoyuan County's upgrade to municipality, the Sub-Committee updated the administrative boundary map files of the TREIF Earthquake Risk Assessment (TREIF-ERA) model, and revised the policy import programs and database as well as other related programs accordingly.

- 2. 為因應103年桃園縣升格桃園市,更新本基金地震風險評估模型之行政區界圖資,並配合修改匯入保單程式與資料庫,及相關程式
- 3. 參考國外住宅地震保險制度費率計算公式,大多數採風險係數法,本保險費率計算公式維持不變,仍援例採風險係數法。

承保理賠與法制分組

承保理賠與法制分組召開5次會議,完成研議賠案彙整審查與共保攤賠作業程序、研議建制本保險 代位追償及防騙機制、相關理賠作業處理程序之檢討修正、理賠機制模擬演練計畫及執行、本保險合格 評估人員及災區聯合理賠服務中心進駐人員人力需求暨訓練計畫之研擬、本保險複評審查機制之人力需 求之檢討、本保險相關辦法及規定檢討修正、保單條款檢討或修正等工作項目。

資訊統計與教育推廣分組

資訊統計與教育推廣分組召開5次會議,完成資訊安全管理制度(ISMS)暨個人資料管理制度(PIMS)之導入、地震保險基金資訊設備(含虛擬化主機)環境之檢視與評估、住宅地震保險傳輸作業之檢討、104年度住宅地震保險公益宣導計畫之修正、105年度住宅地震保險公益宣導計畫之擬定等工作項目。



■ 2015 年本基金贊助蘋果劇團表演

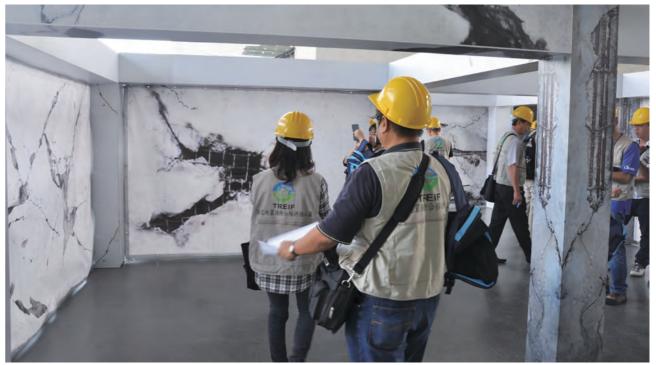
3. After studying the residential earthquake insurance premium calculation methods of other countries, it was concluded that the premium calculation for the residential earthquake insurance will remain using Risk Coefficient Method since it is the method adopted by most of the countries.

The Underwriting, Claim and Legal Subcommittee

The Underwriting, Claim, and Legal Subcommittee arranged 5 meetings to achieve the following: studying the procedures of verifying claim payment and co-insurance pool loss recovery process; studying the establishment of subrogation and fraud prevention mechanism for the Scheme; reviewing and revising the claim settlement procedures related to the residential earthquake insurance; planning and executing the simulation drills for claim settlements; developing a manpower demand and training plan for qualified adjusters and the stationed personnel of joint claim service centers of disastrous area; reviewing the manpower demand for loss re-assessment mechanism; examining and revising the guidelines and regulations related to the residential earthquake insurance; and reviewing and modifying policy clauses.

The IT, Statistics and Educational Promotion Subcommittee

The IT, Statistics and Educational Promotion Subcommittee assembled 5 meetings to accomplish the following: completing the implementation of the ISMS (Information Security Management System) and PIMS (Personal Information Management System); reviewing and evaluating the facility and environment of the TREIF's information system (including Virtual Machine); reviewing data transmission procedures of the residential earthquake insurance; revising the business promotion plan for 2015; and developing the business promotion plan for 2016.



■ 2015.10.16 住宅地震保險理賠機制模擬演練 - 災損評定演練

■ 法令修正

◆ 本保險相關要點、規範及基準之檢討修正

修正「住宅地震保險理賠案件處理費用申請及攤回規範」,名稱修正為「住宅地震保險理賠費用 申請、審核報銷及攤回規範」,將各項費用之審核報銷程序、帳務處理及攤回等內容予以明定,同時將 其他規範中理賠費用統一納入本規範中,並新增單筆金額逾五萬元及五萬元以下之採購支出申請單與彙 總表。

◆ 現行保單條款之檢討修正

配合103年7月10日主管機關核准新增第四章住宅玻璃保險, 爱修正本保險條款為第五章,並配 合修正各條款條次。

■ 訓練與宣導

◆ 合格評估人員訓練

地震保險基金委外辦理住宅地震保險全損評定及鑑定人員新訓及複訓課程,俾使保險業界理賠人 員接受此專業訓練後,擔任本保險合格評估人員,秉持公平、迅速、謹慎的原則,於地震後擔負第一線 受災建築物評定作業之重責大任。2015年辦理臺北、臺中及高雄共計13場次訓練課程,培訓合格評估 人員新訓274人,複訓428人。

◆ 災區聯合理賠服務中心進駐人員訓練

為期地震後有充足且優質之人力進駐災區聯合理賠服務中心,且使進駐人員均能熟悉本保險理賠 作業程序,以提供迅速確實之服務予災區民眾,地震保險基金委外辦理住宅地震保險災區聯合理賠服務 中心進駐人員新訓課程。2015年辦理臺北及臺中共3場次訓練課程,培訓進駐人員新訓28人,複訓107 人。

◆ 專業技師講習

為使參與住宅地震保險鑑定之專業技師及建築師充分瞭解住宅地震保險理賠流程及理賠標準,俾 順利完成受託建築物鑑定作業,地震保險基金辦理講習會。2015年於臺北市、臺中市及高雄市辦理5場 專業技師及建築師講習會,共有219位技師及建築師參與講習。

Revisions of Laws and Regulations

♦ Reviewing and Amending Principals, Guidelines, and Standards of the Residential Earthquake Insurance

"Guidelines on the Application of Claim Settlement Expenses and Loss Recovery for Residential Earthquake Insurance" was amended to read "Guidelines on the Application of Claim Settlement Expenses, Approval for Expense Reimbursement, and Loss Recovery for Residential Earthquake Insurance". The amended guidelines now clearly states the approval process for expense reimbursement, account settlement and loss recovery, and consolidates the rules for claim settlement expenses from other guidelines. In addition, separate application forms and summary table are provided in the amended guidelines for individual purchase over and under NTD50,000.

♦ Review and Modification of Policy Clauses of the Residential Earthquake Insurance

In line with the competent authority's approval of adding Chapter 4 Residential Glass Insurance, the policy clause of residential earthquake insurance, including all contents within the section, was moved to Chapter 5.

■ Training & Promotion

♦ Training for Qualified Adjusters

TREIF outsourced the session arrangement of training and retraining for qualified adjusters. Claims personnel who underwent the trainings could become qualified adjusters, who are expected to uphold the principles of justice, responsiveness, and discipline and assume the important responsibility of making assessment in the frontline after an earthquake hits. In 2015, a total of 13 training classes were held in Taipei, Taichung and Kaohsiung to train 274 new qualified adjusters and retrain 428 qualified adjusters.

♦ Trainings for Stationed Personnel of Joint Claim Service Centers of Disastrous Areas

TREIF commissioned an outsourcing agency to arrange training sessions for stationed personnel of the joint claim service centers to ensure a sufficient number of qualified personnel will be available to report for duty at joint claim service centers in an earthquake disaster, and that these stationed personnel are familiar with the claim settlement procedures of the residential earthquake insurance and are able to provide responsive and effective services to policyholders in disastrous areas. In 2015, a total of 3 training classes were held in Taipei and Taichung to train 28 new stationed personnel and retrain 107 stationed personnel.

◆ 業務宣導

加強辦理各項宣導活動,呼籲社會大眾正視地震風險,提升住宅地震保險正確認知。 2015年地震保險基金辦理之宣導活動:

- (一)與嘉義市及臺東縣政府合辦地震教育國中小學藝文競賽,並贊助經費,學校師生除受鼓勵外,亦因創作產生深刻之地震風險意識,對偏遠地區宣導效益極大,共138校熱烈響應,獲 獎605人。
- (二)為使偏遠學校之學生能更深刻了解地震災害的影響,藉此深植地震防災觀念,並均衡偏鄉 與都會學校使用防災教育資源之機會,本基金與國立自然科學博物館合辦「2015年度補助 偏遠學校地震防災知識之旅」,補助偏鄉學校參觀921地震教育園區,該園區於重建記錄館 展示住宅地震保險制度建制之相關資訊。
- (三)為提升國人地震風險意識,本基金贊助劇團於公開表演中,納入地震防災避難知識,以寓 教於樂方式加強民眾地震風險及避難正確觀念。
- (四)持續辦理面對面宣導,主要包括:
 - 1. 學校教育宣導,共34場,參加人數4,976人次;其中包含利用本基金設置於臺北市內湖 防災科學教育館之住宅地震保險展示區,以遊戲互動方式向國小學生說明地震安全知識。
 - 2. 辦理社會大眾講座式宣導活動及大型攤位宣導活動,共59場,參加人數13,796人次。
 - 3. 赴各大銀行、保險公司辦理宣導,共7場,參加人數361人次。
- (五)辦理臉書宣導,及有獎徵答等活動。
- (六)於內政部消防署臺灣抗震網,建置住宅地震保險專屬網頁,宣導相關資訊。
- (七)於全國各大報紙、雜誌刊登廣告等各項報導。
- (八)於有線、無線電視台播放宣導短片廣告。



■ 2015.10.14 新北市新莊幼兒園校園宣導活動

Professional Technician Workshops

TREIF organized several workshops to ensure that professional technicians and architects participating in the assessment operations could fully understand the claims adjustment process and standards, thus are able to complete the assessment on damaged buildings that are commissioned to the technicians/architects. In 2015, a total of 5 professional technician and architect workshops were held in Taipei, Taichung, and Kaohsiung. A total of 219 technicians and architects attended the workshops.

Business Promotion

TREIF organized numerous promotional events to call for public's attention on earthquake risk and disseminate knowledge about residential earthquake insurance.

TREIF's promotional activities in 2015 include:

- TREIF sponsored and co-organized with Chiayi City and Taitung County governments the earthquake awareness
 education related art and literature contests among their elementary and junior high schools. The contests were
 participated by 138 schools, and 605 students were awarded for their creativity, proven the effectiveness of the
 advocacy activities.
- 2. To help students in rural areas understand the impact of earthquake and plant the concept of earthquake disaster reduction in their minds, TREIF sponsored and co-organized the "2015 Earthquake Disaster Reduction Field Trip for Students in Rural Area" with the National Museum of Natural Science and subsidized these schools' visits to the 921 Earthquake Museum, which features important information about the establishment of the residential earthquake insurance scheme.
- 3. To raise earthquake risk awareness of the general public, TREIF sponsored a theater company to perform stage plays, emphasizing the correct earthquake risk reduction concept and evacuation procedures through edutainment.
- 4. TREIF continued to organize face-to-face promotional events such as:
- (1) 34 earthquake insurance promotion activities were held for schools to reach out to more than 4,976 participants. One kind of the activities was teaching earthquake safety tips to elementary students through interactive games held at the "Residential Earthquake Insurance Exhibition Room" of Fire Safety Museum of Taipei City Fire Department.
- (2) 59 public seminars and outreach events were held and attended by 13,796 people.
- (3) Seven residential earthquake insurance promotional events were held in banks and insurance companies and attended by 361 participants.
- 5. Facebook account was set up to post advocacy articles and hold fun quiz promotion activities.
- 6. Setting up residential earthquake insurance webpage in National Fire Agency's "Taiwan Earthquake Drill COME Website" to promote the insurance.
- 7. Media advertisement on national newspapers, magazines, and various print media;
- 8. A short advocacy film broadcasted on public and cable television channels.

2015 年本基金與臺東縣府合辦地震防災教育宣導繪畫比賽



■ 2015 年太某会與臺東縣府会辦地電防災教育宣道繪書比賽頒將典禮 - 太某会随董事長即仁與獲將學生代表合影



■ 2015 年本基金與臺東縣府合辦地震防災教育宣導 繪畫比賽部分特優作品 - 國小高年級組



■ 2015 年本基金與臺東縣府合辦地震防災教育宣導 繪畫比賽部分特優作品 - 國中組

2015 年本基金與嘉義市府台辦地震防災教育藝文競賽



■ 2015 年太某金與喜業市府会辦地電防災教育藝文證賽頒將典禮(随董事長明仁教記







■ 資訊作業

◆ 資訊安全管理制度 (ISMS) 暨個人資料管理制度 (PIMS) 之導入

建置資訊安全管理制度(ISMS),可提升資訊安全管理之持續維護與改善能力,進而降低資訊風險。而建置個人資料保護管理制度(PIMS),可提升個人資料保護管理持續維護與改善能力,進而加強個人資料資訊保護作為。故主管機關指示就存有個資之重要核心系統,於104年底前及105年底前導入個人資訊管理制度及資訊安全管理制度。

為符合主管機關所訂資訊安全與個人資料保護之指示,並建立與落實資訊安全暨個人資料保護管理相關作業與程序,以完備文件化及系統化的管理機制,持續監督及審查資訊安全暨個人資料保護管理績效,地震保險基金整合資訊業務相關作業規範,參考ISO27001與BS10012國際資訊安全標準、我國個人資料保護法及相關法令、法規,於104年導入資訊安全管理暨個人資料管理兩項制度。

◆ 配合推動政府資料開放政策提供28項開放資料集

開放資料是將政府部門運作持續產生的週期性大量資料,在保障個資的前提下,開放提供作目的外的加值運用,以期達到全民參與、透明化政府的效益。地震保險基金為配合主管機關推動資料開放政策辦理事項,依免費、免申請、符合現行法規、開放格式等原則,提供政府開放資料共計28項,以便利民間分析運用,俾利充分活化政府調查資料。包括:

- ●業務及財務狀況11項。
- ●活動及課程資料11項。
- ●組織及法令規章2項。
- 其它資訊 4項。



■ 2015 年本基金贊助學校參觀 921 地震教育園區

■ Information Operation

♦ Implementation of ISMS and PIMS

The implementation of information security management system (ISMS) and personal information management system (PIMS) will improve the overall the system maintenance and enhancement capability and reduce information security risk. Therefore, the competent authority commanded that ISMS and PIMS must be implemented before 2016 on any core system that stores personal information data.

To fulfill the competent authority's requirement and establish a complete set of procedures for information security and personal information management thus to fulfill a comprehensive documentation and systematic management mechanism that allows monitoring and assessing the effectiveness of information security and personal information protection measures, TREIF integrated relevant guidelines and the Personal Data Protection Act and followed ISO27001 and BS10012 standards to implement ISMS and PIMS in 2015.

◆ Provision of 28 Categories of Open Data

Open data is a government policy which supports the sharing of large amount of periodic, but non personal, data generated from government operation to the general public free of charge to encourage reuse of data and government transparency. In compliance with the open data policy, TREIF has made 28 categories of data available in government's open data platform, including:

- 11 categories of data related to business and finance.
- 11 categories of data related to activities and classes offered.
- 2 categories of data related to organization and laws and regulations.
- 4 categories of data on other information.



■ 2015.10.16 住宅地震保險理賠機制模擬演練 (保險局陳組長清源致詞)

◆ 建置資金運用證券子系統

台股指數股票型基金(ETF)具有分散投資風險、投資收益穩定,且中長期之績效報酬優於定 存,故主管機關鼓勵所屬周邊單位,研議增加投資項目將台股ETF納入投資標的。爰依據地震保險基金 管理辦法規定,報請主管機關核准投資台股ETF。

為配合增加台股ETF投資項目,於地震保險基金資金運用系統增加證券子系統之建置,功能包括 證券資料維護、證券每日作業及證券報表列印等。

◆ 電腦異地備援機制及演練

為確保地震保險基金資料庫及資訊系統之安全,地震保險基金於2007年建置電腦異地備援機制, 提供業務永續運作之基礎,不因設備異常或災難發生而中斷營運,備援地點為桃園龍潭(宏碁渴望園 區),建置初期備援範圍為網域控制伺服器、主資料庫伺服器、電子郵件伺服器、檔案伺服器及網站 伺服器,另為強化地震保險基金異地備援系統之完整性,分別於2009年12月、2010年12月完成複保險 查詢平台、及其點對點機制之異地備援機制。

地震保險基金每年進行兩次異地備援模擬演練,2015年分別於4月及10月進行,以確保當大災難 發生導致重要電腦設備毀損無法運作因而需啟動異地備援機制時,各項系統切換作業能順利進行。

◆ 電腦系統弱點掃瞄作業

執行弱點掃描之目的在於事先偵查電腦系統存在的漏洞及系統內部惡意程式,俾改善弱點,以強 化整體網路與系統安全,地震保險基金每年均辦理電腦系統弱點掃瞄作業。104年度除進行主機及網站 系統弱點掃描外,並研議及建置APT狙擊手服務,以防範最近常見的網路攻擊型態-進階持續性滲透攻 擊 (Advanced Persistent Threat, APT)。

◆ 電腦系統駭客入侵模擬演

為提升地震保險基金駭客入侵防護與應變處理能力,以確保電腦系統發生駭客入侵時,儘速回復 系統之正常運作,規劃執行地震保險基金駭客入侵演練作業,利用模擬情境方式演練地震保險基金電 腦系統遭遇駭客入侵後之緊急應變措施及通報作業。

地震保險基金於2015年12月24日進行駭客入侵演練作業,本次演練為防範最近常見的網路攻擊型 態. 進階持續性滲透攻擊(Advanced Persistent Threat, APT),特加強有關APT攻擊之演練作業。

♦ Establishment of Securities Subsystem

Taiwan Exchange Traded Funds (ETF) is an investment option for risk diversification that offers stable and higher mid- and long-term investment return than term deposit. Under the advice of the competent authority, TREIF evaluated the benefit of investing in Taiwan ETF and submitted a request to the regulatory authorities of adding ETF to our investment portfolio for approval based on stipulations under the Regulations Governing the Taiwan Residential Earthquake Insurance Fund.

In line with the change, a securities subsystem is built in the investment system of TREIF, to provide functions such as data maintenance for securities investment and producing the daily securities operation and investment report.

♦ Disaster Recovery Mechanism System and Simulation Drills

To ensure the security of TREIF database and the information system, in 2007 TREIF established a disaster recovery system, building a foundation for sustainable operation while preventing business disruption due to an equipment malfunction or natural disaster. The recovery system is located in Lungtan, Taoyuan County (Acer Aspire Park). In the initial stage, the scope of the recovery covers domain controller servers, primary database servers, email server, file server and web site server. Moreover, as part of an effort to strengthen the comprehensiveness of the disaster recovery system, TREIF completed the building of a recovery system for double insurance verification platform and the Host-to-Host System for its disaster recovery platform in December, 2009 and December 2010, respectively.

Every year, TREIF conducts two disaster recovery system simulation drills to ensure system transitions to disaster recovery system can be done smoothly in case that computer equipment are damaged when an earthquake hits. In 2015, these drills were conducted in April and October.

♦ Vulnerability Assessment

TREIF conducts a vulnerability assessment every year. The purpose of vulnerability assessment is to identify security vulnerabilities and malwares in the computer system so that weakness can be fixed and the security of the entire network and system can be strengthened. In 2015, in addition to the vulnerability assessment of the mainframe computer and website, TREIF studied and built APT SNIPER service to protect against advanced persistent threat hacking.

♦ Cyber Attack Drill

To enhance the ability to defend against and properly respond to cyber attack, TREIF developed and executed a cyber attack drill, carrying out emergency measures and reporting procedures in a rehearsal under a simulated scenario, to ensure the ability to quickly recover the system in case of system hacking.

On December 24, 2015, TREIF conducted a cyber-attack drill, emphasizing protection against advanced persistent threat hacking, which is a commonly reported cyber-attack pattern seen recently.

■ 舉辦第九屆天災風險研討會

地震保險基金於2015年11月24日舉辦「第九屆天災風險研討會」,研討會主題為「因應與管理日 益增加之天災風險」,邀請國、內外專家學者等講授天災相關議題,提升本基金及業界天災管理能力。 本研討會出席來賓,包括主管機關代表、保險及再保險業高階主管、業務相關同仁、學術研究單位等共 約130人參與。

研討會擷取新知與經驗分享如下:

- 1. 透過再保經紀人介紹美國巨災保險制度起源與最新發展,以作為改善我國住宅地震保險制度檢 討之借鏡參考。
- 2. 瞭解目前最新地震觀測技術之發展與大數據資料如何運用在巨災風險管理上,俾使與會貴賓及 保險業者,重視天災風險管理,並強化產險業天災風險管理知能。



■ 2015.11.24 天災風險研討會(金管會黃副主委天牧致詞)



■ 2015.11.24 天災風險研討會(中央大學蔣教授偉寧專題演講)

■ Organizing the 9th Natural Catastrophe Risks Conference

TREIF organized "the 9th Natural Catastrophe Risks Conference" on November 24, 2015, featuring the theme "Respond to and Manage the Increasing Risks of Natural Catastrophe." Many international and domestic experts and scholars were invited to give catastrophe related speeches, providing valuable information on expanding risk management capability. More than 130 guests participated in the Conference including: representatives from the competent authority, senior management of insurance and reinsurance companies, and colleagues, scholars, and researchers.

The new knowledge and experience shared at the Conference are mainly as follows:

- 1. Finding ways to improve the Residential Earthquake Insurance Scheme by learning from reinsurance brokers sharing on the history and the most recent development of the US's catastrophe insurance system;
- 2. Emphasizing the importance of catastrophe risk management and strengthening the risk management knowledge and skills of the non-life insurance industry through introduction of the latest seismic monitoring technology and application of big data in catastrophe risk management.



■ 2015.07.08 臺北市消防局消防營宣導活動

財務概況

■ 收入概況

2015年再保費收入新臺幣35.31億元較2014年度之新臺幣34.43億元成長2.56%,其主要原因為本 基金持續研議提升投保率方案,並結合業務宣導,使得2015年度實際有效保單件數較預期增加,致再 保費收入增加。此外,利息收入亦隨著各項準備金累積而成長,綜計地震保險基金2015年總收入新臺 幣38.80億元較2014年成長2.96%。

🔵 各年度收入 2011-2015

單位:新臺幣仟元

年度	2011	2012	2013	2014	2015
再保費收入	3,171,822	3,206,389	3,332,002	3,442,911	3,531,024
利息收入	202,568	237,309	272,271	320,408	344,710
其他收入	3,821	4,915	5,188	5,156	4,445
收入合計	3,378,211	3,448,613	3,609,461	3,768,475	3,880,179
成長率	4.57%	2.08%	4.66%	4.41%	2.96%

■ 準備金累積

地震保險基金係依下列規定提存特別準備金:

- 1. 每年年底應就分進之純保險費收入總額,扣除共保組織及國內、外再保險市場或資本市場危險 分散成本、淨自留賠款、未滿期保費準備淨變動、賠款準備淨變動及支付融資貸款利息後之餘 額,全數提存特別準備金。
- 2. 每年年底應就本保險附加費用收入及不含資金運用收益之其他各項收入總額,扣除各項成本費 用後之餘額,全數提存特別準備金。

Revenue

Financial Overview

In 2015, the reinsurance premium revenue totaled NTD3.531 billion, up by 2.56% when compared to last year's NTD3.443 billion mainly because of our persistent effort in researching for ways to raise take up rate combined with successful business promotion campaigns that generated good business results and led to a higher number of policy in-force than expected. In addition, interest income increased as various reserves accumulated. In summary, the total revenue of TREIF for 2015 amounted to NTD3.880 billion, up by 2.96% from previous year.

Annual Revenue 2011-2015

Unit: NTD1,000

Year	2011	2012	2013	2014	2015
Reinsurance Premiums Revenue	3,171,822	3,206,389	3,332,002	3,442,911	3,531,024
Interest Revenue	202,568	237,309	272,271	320,408	344,710
Others Revenue	3,821	4,915	5,188	5,156	4,445
Total	3,378,211	3,448,613	3,609,461	3,768,475	3,880,179
Growth Rate	4.57%	2.08%	4.66%	4.41%	2.96%

Accumulation of Various Reserves

TREIF shall set aside special reserve pursuant to the following provisions:

- 1. At the end of each year, TREIF shall set aside the balance of the total amount of pure premium received after deduction of premium allocated to the Pool, the costs in connection with spreading of risk on domestic, oversees reinsurance or capital markets, net retained loss, net change in unearned premium reserve, net change in loss reserve, and interest paid for financing loans as special reserve.
- 2. At the end of each year, TREIF shall set aside the balance of the income from expense loading plus the sum of various incomes excluding the financial income after deduction of operating costs and expenses as a special reserve.

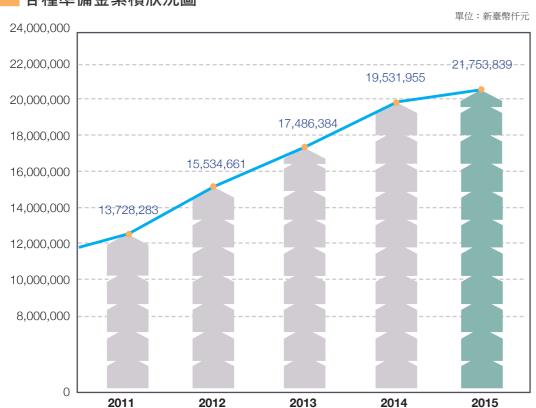
截至2015年底,地震保險基金累計提存之特別準備為新臺幣197.16億元,未滿期保費準備12.77億元,預留調整準備為新臺幣5.05億元,信用風險準備為新臺幣2.56億元,各項準備金之累積餘額達新臺幣217.54億元,與2014年底新臺幣195.32億元相較,成長率為11.38%,近年來累積狀況如下:

各種準備金累積狀況

單位:新臺幣仟元

年度	2011	2012	2013	2014	2015
特別準備	13,305,316	13,906,218	15,721,028	17,629,590	19,715,519
未滿期保費準備	_	1,124,319	1,176,769	1,226,730	1,277,242
預留調整準備	300,274	348,979	399,657	451,886	505,370
信用風險準備	122,693	155,145	188,930	223,749	255,708
合計	13,728,283	15,534,661	17,486,384	19,531,955	21,753,839
成長率	17.14%	13.16%	12.56%	11.70%	11.38%

各種準備金累積狀況圖



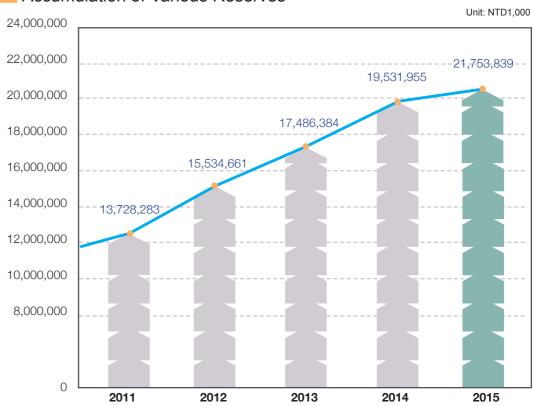
As of the end of 2015, TREIF's cumulative special reserve was NTD19.716 billion, net unearned premium reserve was NTD1.277 billion, reserve against adjustment of premiums was NTD505 million, and credit risk reserve was NTD256 million. Total reserves reached NTD21.754 billion, up by 11.38% in comparison to NTD19.532 billion in 2014. The details of the accumulation of various reserves in recent years are recorded in the following charts:

Accumulation of Various Reserves

Unit: NTD1,000

Year	2011	2012	2013	2014	2015
Special Reserve	13,305,316	13,906,218	15,721,028	17,629,590	19,715,519
Net Unearned Premium Reserve	_	1,124,319	1,176,769	1,226,730	1,277,242
Reserve Adjustment	300,274	348,979	399,657	451,886	505,370
Credit Risk Reserve	122,693	155,145	188,930	223,749	255,708
Total	13,728,283	15,534,661	17,486,384	19,531,955	21,753,839
Growth Rate	17.14%	13.16%	12.56%	11.70%	11.38%

Accumulation of Various Reserves



■ 財源籌措計畫

地震保險基金依據各項收支及投保率之預估、危險分散機制、累積特別準備金及相關法令等之變動,推估未來可能成長的規模,並考量國內外金融市場的籌資方式,擬訂地震保險基金因應資金不足支應賠款時之財源籌措計畫。

一旦發生大地震,地震保險基金即透過早期損失評估系統並配合其他合理預估方式,儘速估算地 震保險基金應攤付之賠款及資金缺口,並就資金缺口研擬財源籌措因應方式。如果賠款金額不大,由地 震保險基金之累積資金支應或向銀行信用借款方式自行籌資,若資金缺口過大致地震保險基金無法自籌 財源解決時,為保障被保險人權益,即依保險法第138-1條規定報請主管機關會同財政部報請行政院核 定後,由國庫提供擔保,以取得必要之資金來源。

經地震損失賠付時效及成本分析,現行財源籌措計畫之結論係採取地震發生後,依據預估之資金 缺口,再向國內金融機構取得貸款最具效益,當資金缺口超出地震保險基金自行籌措財源數額時,則立 即向政府申請核發國庫保證函擔保舉債,以期迅速取得資金,保障被保險人之權益。



■ 2015.09.21 第十屆世界巨災管理機制論壇會議於法國巴黎舉行 - 本基金陳董事長明仁(左三)及各與會代表合照

■ Financing Plan

TREIF forecasts its growth based on estimated annual revenue, expenditure and take-up rate, as well as changes in the risk spreading mechanism, cumulative reserves and relevant laws. TREIF prepares a financing plan in case when the cumulative reserves are insufficient to cover the claim payments by taking into account the financing methods in domestic and overseas financial markets.

When a major earthquake occurs, TREIF could calculate an estimated payable claims and possibly fund shortfall through the Early Seismic Loss Estimation System in conjunction with other reasonable estimations and formulate a financing plan to tackle the fund shortfall. If the payable claims can be managed by TREIF alone, TREIF will finance it by utilizing its cumulative funds, or seek bank credit. However, if the payable claims exceed the amount that TREIF can manage, in order to protect the interests of the insured, TREIF may first request the competent authority and the Ministry of Finance to jointly apply for Executive Yuan's approval, based on Insurance Act Article 138-1, then obtain necessary financial resource using National Treasury as a guarantor.

After analyzing the timeliness and the cost of raising fund, the existing financing plan concludes that: the timing for financing should come after the occurrence of an earthquake; financing through domestic banks is the most effective way and the amount of financing should be based on the forecasted fund shortfall; to protect the interests of the insured, once the fund shortfall exceeds TREIF's financing capacity, TREIF should immediately petition to the competent authority and the Executive Yuan for the approval to obtain a guarantee letter issued by the National Treasury, which will enable TREIF to quickly secure the fund.



■ 2015.10.16 住宅地震保險理賠機制模擬演練 - 災損評定行前說明

■ 資金運用

地震保險基金資金之運用,以安全性為首要考量,同時兼顧投資標的之流動性及收益性,並本風 險分散原則作最妥適之配置。

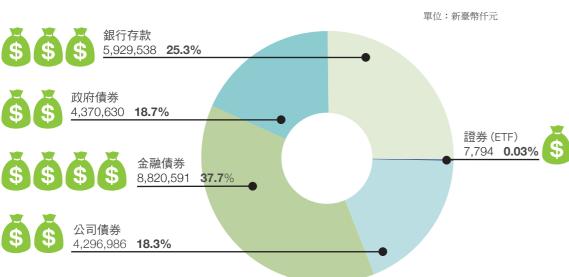
截至2015年底,地震保險基金可運用資金總額較前一年底增加新臺幣25.4億元,累計已達新臺幣234.26億元,其中銀行存款新臺幣59.29億元,政府債券新臺幣43.7億元,金融債券新臺幣88.2億元,公司債新臺幣43億元,其餘新臺幣0.07億元為證券(ETF)。

可運用資金配置狀況表

單位:新臺幣仟元

陌日	2014	4年	201	5 年	上較增減
项目 	金額	比例	金額	比例	金額
銀行存款	5,977,714	28.6%	5,929,538	25.3%	(48,176)
政府債券	3,197,023	15.3%	4,370,630	18.7%	1,173,607
金融債券	8,721,873	41.8%	8,820,591	37.7%	98,718
公司債券	2,988,933	14.3%	4,296,986	18.3%	1,308,053
證券 (ETF)	_	_	7,794	0.03%	7,794
總計	20,885,543	100.00%	23,425,539	100.00%	2,539,996

● 2015 年可運用資金配置



■ Investment Management

The top concern of TREIF's investment management is safety while keeping a good balance of liquidity and profitability, as well as risk diversification to achieve optimal portfolio.

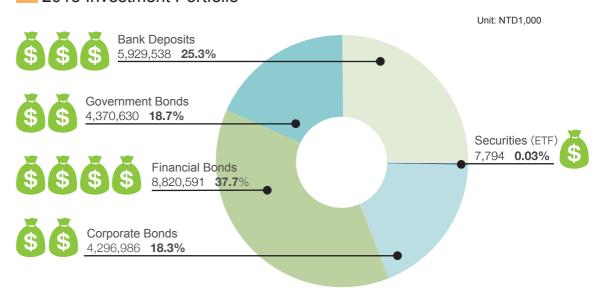
As of the end of 2015, TREIF's total available funds reached NTD23.42 billion, increasing by NTD2.54 billion when compared with the previous year. Total available fund was comprised of NTD5.93 billion in bank deposits, NTD4.37 billion in government bonds, NTD8.82 billion in financial bonds, NTD4.3 billion in corporate bonds, and the remaining NTD7 million in securities (ETF).

Investment Portfolio

Unit: NTD1,000

li	20	14	2015		Change in
Item	Amount	%	Amount	%	Amount
Bank Deposits	5,977,714	28.6%	5,929,538	25.3%	(48,176)
Government Bonds	3,197,023	15.3%	4,370,630	18.7%	1,173,607
Financial Bonds	8,721,873	41.8%	8,820,591	37.7%	98,718
Corporate Bonds	2,988,933	14.3%	4,296,986	18.3%	1,308,053
Securities(ETF)	-	_	7,794	0.03%	7,794
Total	20,885,543	100.00%	23,425,539	100.00%	2,539,996

2015 Investment Portfolio



2015 大事紀 Major Events

∃ 期 Date

大事紀 Major Events

2015/1/10

赴大漢技術學院進行宣導。

Holding advocacy event at Dahan Institute of Technology.

2015/1/17

參與臺北市消防局舉辦之「119 防災宣導活動」。

Participating in the "2015 119 Disaster Risk Reduction Advocacy Event"

organized by the Taipei City Fire Department.



2015/2/14

2015/2/16

赴第一產物桃竹分公司進行宣導。

Holding a business promotion event in Taochu Branch of the First Insurance

Company.

提供 28 項政府開放資料集。

Providing 28 categories of data to the government open data platform.

2015/3/7

參與新北市政府防災宣導活動。

Participating in the Disaster Risk Reduction Advocacy Event organized by

New Taipei City Government.

2015/3/11 赴第一產物臺南分公司進行宣導。

Holding a business promotion event in Tainan Branch of the First Insurance

Company.

2015/3/21 赴華南產物進行宣導。

Holding a business promotion event at South China Insurance Company.

2015/3/27

參與新竹市消防局「全民防衛動員暨災害防救(民安1號)演

習」活動。

Participating in the "National Defense Mobilization Exercise and Disaster Risk Reduction and Relief Drill (Min-An 1st)" organized by Fire Bureau of

Hsinchu City.

2015/3/31

完成住宅地震保險超額賠款再保合約 2015 年第二層續約。

Completing contract renewal of 2015 2nd layer excess of loss reinsurance.

2015/3-5 月

赴桃園市防災社區進行教育訓練活動。

9-11 月

Holding a disaster risk reduction training program at designated

communities in Taiyuan City.

2015/4/9

參與桃園市消防局「全民防衛動員暨災害防救(民安1號)演

習」活動。

Participating in the "National Defense Mobilization Exercise and Disaster Risk Reduction and Relief Drill (Min-An 1st)" organized by Taoyuan City

Fire Department.



<u>/</u>	
日 期 Date	大事紀 Major Events
2015/4/9	赴第一銀行忠孝分行進行宣導。 Holding a business promotion event at Zhongxiao Branch of the First Bank of Taiwan.
2015/4/16	參與基隆市全民防衛動員暨災害防救 (民安 1 號) 演習。 Participating in the "National Defense Mobilization Exercise and Disaster Risk Reduction and Relief Drill (Min-An 1st)" organized by Keelung City.
2015/4/17	參與宜蘭縣政府消防局災害防救演習。 Participating in the Disaster Risk Reduction and Relief Drill organized by Yilan County Fire Department.
2015/4/24	赴宜蘭縣宜蘭市防災社區進行宣導。 Holding a disaster risk reduction advocacy event at designated communities in Yilan City of Yilan County.
2015/4/25	電腦系統異地備援第一次演練。 First Disaster System Recovery Drill for 2015.
2015/4/28	參與臺北市政府全民防衛動員暨災害防救 (民安 1 號) 演習。 Participating in the "National Defense Mobilization Exercise and Disaster Risk Reduction and Relief Drill (Min-An 1st)" organized by Taipei City Government.
2015/5/2	參與臺中霧峰「阿罩霧媽祖文化節」宣導活動。 Participating in an advocacy activity at the "Atuubu Matzu Cultural Festival" organized by Wufeng District of Taichung City.
2015/5/6	赴致理科技大學進行「保金週」攤位宣導及對保險金融系學生進行互動式課程。 Holding "Insurance Golden Week" outreach event and conducting interactive course program for students majoring in insurance and finance management at Chilee University of Technology.
2015/5/7 6/5 & 6/10	參與嘉義縣政府舉辦之災害防救深耕計畫。 Participating in the Disaster Risk Reduction and Relief Program organized by Chiayi County Government.

日 期 Date	大事紀 Major Events
2015/5/9	參與臺北市政府消防局主辦之南港區南興公園社區防災宣導活動。 Participating in a disaster risk reduction advocacy activity in Nanshin Park of Nangang District organized by Taipei City Fire Department.
2015/5/16	赴第一產物臺中分公司進行宣導。 Holding a business promotion event in Taichung Branch of the First Insurance Company.
2015/5/20	赴臺灣銀行進行宣導。 Holding a business promotion event in Bank of Taiwan.
2015/5/21	赴臺灣土地銀行進行宣導。 Holding a business promotion event in Land Bank of Taiwan.
2015/5/22	參與宜蘭縣政府舉辦之災害防救深耕計畫。 Participating in the Disaster Risk Reduction and Relief Program organized by Yilan County Government.
2015/5/23	北區土木 / 結構 / 大地技師講習會。 Conducting workshop for civil engineer, structural engineer, and geotechnical engineer in northern region.
2015/5-11 月	與嘉義市政府合辦地震防災教育宣導書法 / 繪畫 / 作文徵選比賽。 Co-organizing and sponsoring a calligraphy, drawing, and writing contest with Chiayi City Government to advocate earthquake disaster risk reduction.
2015/6/5	完成資金運用證券子系統之建置。 Establishing securities subsystem.
2015/6/13	中區土木 / 結構 / 大地技師講習會。 Conducting workshop for civil engineer, structural engineer, and geotechnical engineer in central region.



大事紀 Major Events
參加第 51 屆國際保險學會年會 - 全球保險論壇 (Global Insurance Forum),並出席聯合國保險高峰會 (UN Insurance Sector Summit),與各國代表交流。 Attending the 51st International Insurance Society (IIS) annual meeting- "Global Insurance Forum", including the "UN Insurance Sector Summit" held in the United Nations, sharing experience with representatives from various countries.
合格評估人員第 43 期南區複訓。 Conducting the 43rd Qualified Adjuster Retraining Program in southern region.
合格評估人員第 38 期中區新訓。 Conducting the 38th Qualified Adjuster Training Program in central region.
合格評估人員第 39 期北區新訓。 Conducting the 39th Qualified Adjuster Training Program in northern region.
完成住宅地震保險超額賠款再保合約 2015 年第一層續約。 Completing contract renewal of 2015 1st layer excess of loss reinsurance.
補助偏鄉學校參觀 921 地震教育園區。 Subsidizing schools in rural areas to visit the 921 Earthquake Museum.
合格評估人員第 40 期南區新訓。 Conducting the 40th Qualified Adjuster Training Program in southern region.
合格評估人員第 44 期中區複訓。 Conducting the 44th Qualified Adjuster Retraining Program in central region.
參與基隆市消防局舉辦之暑期消防體驗營。 Participating in the "Fire Rescue Summer Camp" organized by the Keelung City Fire Department.
參與金融總會舉辦之「金融服務關懷社會」園遊會(南投場)。 Participating in the "Financial Service Community Care" Fair organized by the Taiwan Financial Services Roundtable (Nantou Event).
參與桃園市平鎮區民團常年訓練進行宣導。 Participating in Taoyuan City Pingcheng District's community regular training activity to advocate residential earthquake insurance.
合格評估人員第 45 期北區複訓。 Conducting the 45th Qualified Adjuster Retraining Program in northern region.
參與基隆市政府舉辦之社區治安研習觀摩活動宣導。 Participating in community safety workshop organized by Keelung City Government to advocate earthquake risk reduction.

日 期 Date	大事紀 Major Events
2015/7/28	參與嘉義縣民雄鄉民防團隊基本訓練宣導。 Participating in community defense training activity in Minsyong of Chiayi County to advocate residential earthquake insurance.
2015/7/28	進駐人員第 5 期北區複訓。 Conducting the 5th Retraining Program for Stationed Personnel in northern region.
2015/7-8 月	參與臺北市政府消防局舉辦之小小幼童消防營。 Participating in "Fire Rescue Camp for Kids" organized by Taipei City Fire Department.
2015/8/6~7	合格評估人員第 41 期北區新訓。 Conducting the 41st Qualified Adjuster Training Program in northern region.
2015/8/8	進駐人員第 6 期中區複訓。 Conducting the 6th Retraining Program for Stationed Personnel in central region.
2015/8/14	合格評估人員第 46 期南區複訓。 Conducting the 46th Qualified Adjuster Retraining Program in southern region.
2015/8/22	北區建築師講習會。 Conducting workshop for architects in northern region.
2015/8/26	合格評估人員第 47 期中區複訓。 Conducting the 47th Qualified Adjuster Retraining Program in central region.
2015/9/5	南區土木 / 結構 / 大地技師講習會。 Conducting workshop for civil engineer, structural engineer, and geotechnical engineer in southern region.
2015/9/10	合格評估人員第 48 期北區複訓。 Conducting the 48th Qualified Adjuster Retraining Program in northern region.
2015/9/19	參與臺北市政府「國家防災日」宣導活動。 Participating in the advocacy event of National Disaster Prevention Day organized by Taipei City Government.
2015/9/21	理賠模擬演練狀況一演練。 Conducting scenario 1 of Claim Settlements Simulation Drill.
2015/9/22~23	合格評估人員第 42 期北區新訓。 Conducting the 42nd Qualified Adjuster Training Program in northern region.
2015/9/24	進駐人員第7期北區新訓。 Conducting the 7th Training Program for Stationed Personnel in northern region.
2015/9/25	參與三峽區安坑里防災示範社區防災演練暨年度成果展宣導活動。 Participating in an advocate activity at the disaster risk reduction drill and annual exhibition of Ankang Village, Sanshia District.



日 期 Date	大事紀 Major Events
2015/9-12 月	與臺東縣政府合辦地震防災教育宣導繪畫比賽。 Co-organizing and sponsoring a drawing contest with Taitung County Government to advocate earthquake disaster risk reduction.
2015/9-11 月	贊助地震防災戲劇表演公益宣導活動。 Sponsoring stage play to advocate earthquake disaster risk reduction.
2015/9/21~25	參加第 10 屆世界巨災管理機制論壇 (10th World Forum of Catastrophe Programme) 並進行簡報,與各國代表交流。 Participating and making presentation in the 10th World Forum of Catastrophe Programme to share experience with representatives from various countries.
2015/10/7	完成再保險經紀人評選作業。 Completing reinsurance broker tender.
2015/10/12~16	模擬演練狀況二演練。 Conducting scenario 2 of Claim Settlements Simulation Drill.
2015/10/17	參與金融監督管理委員會保險局舉辦之「微型高齡免煩惱」居安行車有保障」保險公益路跑暨園遊會活動。 Participating in the"2015 Worry-free with Micro-insurance for The Vulnerable Elderly – Housing Safety and Drive with Protection" Charity Fun Run organized by the Insurance Bureau, Financial Supervisory Commission.
2015/10/20	合格評估人員第 49 期北區複訓。 Conducting the 49th Qualified Adjuster Retraining Program in northern region.
2015/10/24	參與臺北市政府消防局舉辦之大安區社區防災宣導活動。 Participating in the "Daan District Community Disaster Risk Reduction Advocacy Event" organized by the Taipei City Fire Department.
2015/10/24	電腦系統異地備援第二次演練。 Second Disaster System Recovery Drill for 2015.
2015/10/25	參與土城區廷寮里防災示範社區防災演練暨年度成果展宣導活動。 Participating in an advocate activity at the disaster risk reduction drill and annual exhibition of Tingliao Village, Tucheng District.
2015/11/7	北區土木 / 結構 / 大地技師講習會。 Conducting workshop for civil engineer, structural engineer, and geotechnical engineer in northern region.

日 期 Date	大事紀 Major Events
2015/11/14	參與金融總會舉辦之「金融服務關懷社會」園遊會(臺東場)。 Participating in the "Financial Service Community Care" Fair organized by the Taiwan Financial Services Roundtable (Taitung Event).
	住宅地震保險基金
2015/11/17~18	合格評估人員第 43 期北區新訓。 Conducting the 43rd Qualified Adjuster Training Program in northern region.
2015/11/23	電腦系統弱點掃瞄作業。 Conducting vulnerability assessment.
2015/11/24	舉辦 2015 年第九屆天災風險研討會。 Holding the 9th Natural Catastrophe Risk Conference – 2015.
2015/12/7	拜訪嘉義市、臺南市政府消防局。 Visiting Chiayi City Government Fire Bureau and Tainan City Fire Bureau.
2015/12/18	模擬演練檢討會。 Conducting a review session for simulation drills.
2015/12/18	拜訪高雄市政府消防局。 Visiting Kaohsiung City Government Fire Bureau.
2015/12/22	拜訪內政部消防署。 Visiting the National Fire Agency, Ministry of the Interior.
2015/12/22	電腦系統駭客入侵模擬演練。 Conducting a cyber attack drill.
2015/12/29	拜訪內政部營建署。 Visiting the Construction and Planning Agency, Ministry of the Interior.
2015/12/31	完成住宅地震保險共保組織合約 2016 年續約。 Completing the 2016 Residential Earthquake Insurance Co-insurance contract renewals.

