

**SECOND INTERIM REPORT OF THE STANDING COMMITTEE ON
LAW, JUSTICE AND HUMAN RIGHTS**



سیکریٹری جنرل قومی اسمبلی
اسلام آباد



**“Implementation of Building Code, with particular
reference to provisions regarding earthquake, for
suggesting penal provisions, measures and mechanism
regarding violation of said Code”**

Report No. 16

PRESENTED BY

**SENATOR MUHAMMAD JAVED ABBASI
CHAIRMAN**

SENATE SECRETARIAT

SECOND INTERIM REPORT OF THE STANDING COMMITTEE ON LAW, JUSTICE AND HUMAN RIGHTS ON "IMPLEMENTATION OF BUILDING CODE, WITH PARTICULAR REFERENCE TO PROVISIONS REGARDING EARTHQUAKE, FOR SUGGESTING PENAL PROVISIONS, MEASURES AND MECHANISM REGARDING VIOLATION OF SAID CODE"

I, Chairman of the Standing Committee on Law, Justice and Human Rights, have the honour to present second interim report on a matter referred by the House on 10th November, 2015, "Implementation of Building Code, with particular reference to provisions regarding earthquake, for suggesting penal provisions, measures and mechanism regarding violation of said Code".

2. The composition of the Standing Committee on Law, Justice and Human Rights is as under:-

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|-----|---|--------------------------|
| 1. | <i>Senator Muhammad Javed Abbasi</i> | <i>Chairman</i> |
| 2. | <i>Senator Raja Muhammad Zafar ul Haq</i> | <i>Member</i> |
| 3. | <i>Senator Aitzaz Ahsan</i> | <i>Member</i> |
| 4. | <i>Senator Dr. Muhammad Ali Khan Saif</i> | <i>Member</i> |
| 5. | <i>Senator Syed Muzafar Hussain Shah</i> | <i>Member</i> |
| 6. | <i>Senator Saleem Zia</i> | <i>Member</i> |
| 7. | <i>Senator Ms. Ayesha Raza Farooq</i> | <i>Member</i> |
| 8. | <i>Senator Nawabzada Saifullah Magsi</i> | <i>Member</i> |
| 9. | <i>Senator Saeed Ghani</i> | <i>Member</i> |
| 10. | <i>Senator Zaheer ud Din Babar Awan</i> | <i>Member</i> |
| 11. | <i>Senator Mrs. Zahida Khan</i> | <i>Member</i> |
| 12. | <i>Senator Farooq Hamid Naek</i> | <i>Member</i> |
| 13. | <i>Minister for Law, Justice and Human Rights</i> | <i>Ex-Officio Member</i> |

3. The Committee considered the matter in its meetings dated 23rd November 10th December, 2015 and 16th February, 2016, respectively.




4. The Committee invited Pakistan Engineering Council, Ministry of Housing and works, Capital Development Authority and NDMA, to give their input on the instant issue. During the meeting it was informed that:-

- I. A Building Code of Pakistan (Seismic Provisions) – 2007 was formulated by the Ministry of Housing and Works through a consultative process by the core group of experts from Pakistan Engineering Council.
- II. Pursuant to the approval of Pakistan Building Code-2007 by the Cabinet in August, 2007, the Prime Minister advised all the Chief Ministers of the Provinces conveying instructions for the adoption of New Building code.
- III. The Provincial Governments have also accordingly been requested to instruct all their development authorities and departments concerned under their administrative control to ensure that all building plans approved by them are in compliance of the requirements laid down in the Building Code of Pakistan, 2007.
- IV. Implementation of Building Code is enforced by the development authorities in the provinces and CDA in ICT area being the concerned agencies for granting approval of building plans. These developments authorities and CDA have their own building bye-laws and building regulations and any violation made by any developers / builders is dealt with by them according to building regulations.

5. The Committee tasked Pakistan Engineering Council, Capital Development Authority and Ministry of Housing and Works to review the Building Code, 2007 and submit proposals regarding effective implementation and rectification of lacunas, if any, within a period of twelve days.

6. Accordingly, next meeting was convened on 10th December, 2015, wherein, all stakeholders were invited including Ministry of Housing and Works, Pakistan Engineering Council, Capital Development Authority, Earthquake Reconstruction and Rehabilitation Authority (ERRA), National Disaster



Management Authority (NDMA), Provincial Secretaries, Local Government, Provincial Additional Chief Secretaries, Association of Builders & Developers of Pakistan (ABAD) and Islamabad Developers and Citizens Association. The Committee constituted a core group consisting of representatives from NDMA, Ministry of Housing and Works, Capital Development Authority and Pakistan Engineering Council. NDMA has been tasked as the leading agency and the core group, after holding consultations with all the Federal and Provincial stakeholders, will formulate proposals in the form of a Bill. The said Bill, after vetting from the Ministry of Law and Justice will be presented before the Committee within a period of five weeks.

7. A follow-up meeting was held on 16th February, 2016, wherein the core group shared the progress made till date and requested further time in order to hold consultations with the provinces and Ministry of Law and Justice. The Committee in the said meeting proposed following draft recommendations:-

(i) A three step procedures is recommended for administration and implementation of Building Code of Pakistan – Seismic Provisions 2007, here after referred as BCP.

1. Incorporating BCP in existing by-laws of the Development Authorities/Agency.
2. Creation of **Structural Safety Cell (SSC)** within the **Building Control Sections (BCS)** of Development Authorities/Agency.
3. Formulation of **Standard Operating Procedures (SOP)** for design and construction activities to be adopted by SSC and its parent Authority.

STEP -1: AMENDEMENT IN BYLAWS

Existing by-laws of development authorities shall be updated to make compliance of BCP mandatory for all types of construction from single story housing to high rise structure. Prescriptive solutions and recommendations for simple structure may be added in by-laws in conformity with BCP SP 2007.

STEP -2: CREATION OF STRUCTURAL SAFETY CELL (SSC)

COMPOSITION OF SSC

- Quality Managers (M.sc Structures + 5 years of relevant exp.)
- Assistant Quality Managers (M.sc Structures + 2 years of relevant exp.)

OR

(B.sc Civil + 5 years of relevant exp.)

- Special Incentives for QM and AQM have been proposed.

RESPONSIBILITIES OF SSC

- Creation of awareness
- Scrutiny of structural analysis
- Maintaining an approved panel of structural experts for vetting of structural designs.
- Carrying out site Inspection Visits.

POWERS OF SSC

- Stop construction/ demolishing of any building violating approved design and drawings. It shall be followed by three notices:
- 1st notice for compliance within 15 days.
- 2nd notice with disconnecting utility services which shall be restored upon compliance.
- 3rd notice to demolish at the risk and cost of the owner.

STRUCTURAL REQUIREMENTS FOR HOUSING (SINGLE/TWO STOREY)

- NDMA shall finalize (in support with concerned organizations/ departments) construction guidelines for non-engineered and rural building construction
- NDMA, in support and collaboration with all concerned agencies/ departments, shall make arrangements of capacity building of all the stake holders and create awareness among masses (country wide)

STEP -3: FORMULATION OF STANDARD OPERATING PROCEDURES (SOP) FOR ALL STAKEHOLDERS

The owner/developer intending to construct a building/other structure shall fulfill all his duties/obligations listed in Annexure-B and apply for approval to the concerned development authority using all applicable forms contained in Annexure -A.

STRUCTURAL DESIGN

- Detailed structural analysis and design shall be Carried out by Registered Professional Structural Engineer or Registered Structural Design Consultants.
- The design calculations and drawings shall be duly vetted by a structural expert listed on the approved panel of SSC in following cases.

- _ Buildings more than three storey.
- _ Buildings whose occupancy involves large number of people e.g. office buildings, hospitals, mosques, churches, educational facilities, commercial buildings etc.
- _ Special structures e.g. industrial buildings, power plants, recreational buildings, water tanks etc.

- Structural construction drawings duly signed by the structural designer and the vetting engineer/consultant where required as above.
- Proof checking of various designs/reports shall be carried out by SSC

CONSTRUCTION SUPERVISION

- Owner/ Builder shall submit 15 days notice in advance, to SSC for permission of any construction activity.
- All construction except load bearing buildings up to 3 storey shall be carried out by PEC registered Contractors under the supervision of the Construction Engineer or Construction Supervision Consultant
- Construction Engineer/Consultant shall give progress certificates at all

construction levels as per Performa given in Form-7 to Form-10 and Building Completion Certificate as per Performa given in Form-13 at the time of completion.

COMPLETION REPORT

- Submission of completion report in Form No.11 and 12.
- The final inspection of the work shall be made by the concerned Competent Authority within 21 days from the date of receipt of notice of completion report.

QUALITY CONTROL AND INSPECTION BY SSC

All the construction for buildings higher than three stories, public buildings and special structures shall be inspected by Assistant Quality Managers of SSC as per Form-14 and Form-15, at different construction stages.

ISSUANCE OF OCCUPANCY CERTIFICATE

The Authority issuing occupancy certificate before doing so shall ensure that :


- Certificate of lift Inspector has been procured & submitted by the owner.
- The Certificate of Competent Authority for Electrical, Plumbing and fire department for fire requirements.

MAINTENANCE OF BUILDINGS

The owner of a building get his building inspected by a Registered Structural Engineer (RSE) if:

- Buildings are older than twenty five (25) years
- Buildings have reported physical distress

REGISTRATION OF PROFESSIONALS

- Structural Engineers Registration done by many Development Authorities/Agency.
 - No uniform criteria for Registration of Structural Engineers.
 - A uniform criteria for registration to be adopted by Pakistan Engineering
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Council imposing the limits on Qualifications, Work experience and suitable age limits etc.

PENALTY PROVISIONS

Structural/vetting Design Engineer/Consultant

For any Major Fault (As defined in Annexed-C) the structural design engineer/consultant shall be penalized as under:

- For structures comprising load bearing walls up to and including three storey @ Rs 15.00/sq.ft of the covered area.
- For RCC/Steel Frame Structure from four to seven storey @ Rs30.00/sq.ft of the covered area.
- For RCC/Steel Frame Structure more than seven storey @ Rs 60.00/sq.ft of the covered area.
- For Special and life line structures e.g. Auditoriums, Schools, Theaters, Hospitals, Fire Brigade buildings, Telephone buildings etc @ Rs 120.00/sq.ft of the covered area.

Structural/vetting Design Engineer/Consultant

- Penalty shall be imposed to the vetting engineer/consultant @ 50% of the financial penalty mentioned above.
- In the event of structural damage due to defective/inadequate design, the cost of damage shall be borne by the structural design engineer/consultant and vetting engineer/consultant in the ratio of 2:1 respectively.
- The project shall be insured by a A++ rating insurance company.
- The case of such violators shall be referred to Pakistan Engineering Council for taking actions as per PEC Act.

Supervision ENGINEER/Consultant

Penalized @ Rs. 20.00/sq.ft of the covered area or cost of defective structure, whichever is more for Construction not conforming to Approved drawings and

specifications.

Geotechnical ENGINEER/Consultant

- Penalized @ Rs. 100.00/sq.ft of the covered area in case of building structure and @ 1% cost for other structures for false or fake report
- If a structure fails due to faulty geotechnical investigation, then the Geotechnical Engineer/Consultants shall be charged fine up to the extent of cost of damaged structure.

Building Control Authorities/STRUCTURAL SAFETY CELL

- Responsible to accord approval of structure on prohibited / earthquake hazard area.
- Responsible to monitor construction effectively.
- Penalty @ Rs. 30.00/sq.ft of the building area besides taking disciplinary action.
- SSC shall provide the original topography of the construction site viz-a viz present topography in case of made up ground levels.

Contractors/Builders/EXECUTING AGENCY/DEVELOPERS

- Use of substandard materials
- Non adherence of sound engineering practices
- Negligence to follow approved design/drawings.
- The penalty cost shall include demolishing cost of faulty work done and twice the cost of work done.

Owners

- Shall be penalized for structural changes without consent of structural engineer
- Financial penalty @ Rs.200.00/sq.ft for Non conformance.

Purchasers

- The purchaser shall obtain all the approved drawings and documents from the seller. In case of non- availability, the building shall be inspected by approved structural engineers.
- Shall be sealed till the building is retrofitted by a licensed expert/contractor, under the supervision of licensed structure engineer at the cost of purchaser

Material suppliers/SELLERS

- Substandard construction material not conforming to ASTM/BS standards
- Production suspension of 10 days
- A financial penalty up to five (05) million Rupees.
- Production source shall be sealed permanently in case of three violations in total.

8. The most important issue, which needs to be addressed, is the non-existence of any legal/statutory backing/protection available to the Building Code, 2007. Furthermore, the Building Code was developed in the year 2007, however, its implementation remains a serious concern which needs to be addressed. The Committee unanimously decided that Building Construction Act may be enacted empowering the government to promulgate the building code as a legally binding document by providing a comprehensive legal mechanism, wherein role of implementers as well as penalties for the violation shall be clearly spelled out. The Committee is in the process of finalizing a Bill, after finalization the said Bill will be shared with the Provinces for seeking comments.



(RABEEA ANWAR)
D.S / Secretary Committee



(SENATOR MUHAMMAD JAVED ABBASI)
Chairman