RURAL HOUSING SCHEME: QISHLOQ QURILISH INVEST

A. QQI Mandate

1. Qishloq Qurilish Invest (QQI) is a specialized engineering company, the establishment of which was approved¹ on 3 August 2009, in accordance with Presidential Resolution No. 1167, "On Additional Measures to Expand the Scope of Housing Construction in Rural Areas". With the residential construction sector in Uzbekistan at an early stage of development, and without a private sector option that offers sufficient capacity or coverage, QQI was specifically organized to provide technical support for the government's Rural Housing Scheme (RHS). QQI is solely mandated to ensure close technical coordination, effective construction supervision, and timely delivery of the nationwide rural housing construction scheme.

2. QQI has its main office in Tashkent City. With branch offices established in each of the 13 provinces and regions, QQI supports provincial local governments *(hokimiyats)* in implementing the RHS, and overseeing and supervising the construction of new rural houses under the RHS. Defined by presidential resolution, QQI's main roles are:

- a. To undertake a study of the rural housing market, and prepare a strategy for site selection and site development that is based on national design standards for rural community development, rural housing, and rural community facilities (social and commercial), and development of other related rural infrastructure services;
- b. To support provincial *hokimiyat*s in packaging and initiating competitive procurement of turnkey contracts for new rural housing and new/rehabilitated rural community facilities;
- c. To oversee and supervise (as an agent of the provincial *hokimiyat*s and/or the home buyers) the construction of new rural housing, new/rehabilitated rural community facilities, and access to related infrastructure; and
- d. To facilitate appropriate handover of completed new rural houses to home buyers, and new/rehabilitated rural community facilities to operating organizations.

B. QQI Organizational Structure and Staffing Levels

3. QQI's organization structure is presented in Diagram 1 below. QQI has 347 employees, of which 11% are senior management, 32% are administration and support staff, and 57% are engineering and technical inspection specialists. The Tashkent office has 29 staff. The sizes of branch offices vary depending on the number and size of new housing sites to be supervised, with staff ranging between 15 and 23 per office. In each branch office, the technical team is led by a chief engineer, with a technical inspection department that has between 6 and 14 engineers and technical inspection specialists (Table 1).

	2009		2010		2011	
	All	HQ	All	HQ	All	HQ
Management	26	3	39	5	39	7
Administration & Support	27	11	71	14	111	17
Engineers & Technical Inspection Specialists	43	4	145	5	197	5
Total	96	18	255	24	347	29

¹ As a solely owned subsidiary of Qishloq Qurilish Bank.

4. Since its establishment in 2009, QQI has increased its overall total staff level by more than 250%, from less than 100 staff in 2009 to almost 350 staff in 2011. Over the same period, the number of engineers and technical inspection specialists was increased by more than 450%. As of 2011, QQI has on staff almost 200 engineers and technical inspection specialists responsible for overseeing 750 contractors and supervising the construction of 7,400 houses.



Diagram 1: QQI Organizational Structure

Source: QQI

5. QQI engineers and technical inspection specialists are highly qualified and offer an average of 15 years of work experience. QQI requirements for its technical positions specify a master's degree and a minimum of 3-5 years of industry experience. Of the 197 engineers and technical inspection specialists QQI has on staff, 80% meet the education requirement and 87% meet or exceed the experience requirement.

C. QQI Technical Roles

6. With very few housing developers, mainly focused on the urban market, new house construction in rural areas continues to be done primarily by individual households mobilizing family and friends to assist.² There are contractors who undertake construction of new housing

² Raising safety issues particularly in disaster-prone areas.

in rural areas, on a contract basis. However, without extensive experience, designs tend to be ad hoc, and construction quality of a variable standard. Accordingly, under the RHS, QQI is mandated, to act as an agent of the *hokimiyat*s, and homebuyers, to carry out construction supervision of housing construction activities in accordance with modern design specifications and in compliance with state building and construction standards. A number of other agencies are similarly mandated to support the RHS. In addition to QQI, Qishloq Qurilish Loyiha (QQL), the State Committee for Architecture and Construction, and the district *hokimiyat*s, among others, each have mandated roles (detailed in Appendix 3) for construction inspection and for certifying state building and construction standards are met.

7. **"Planned" design approach.** The RHS is strategically designed to implement a "planned" approach to developing rural communities and building rural houses nationwide. QQL, a national design institute, is mandated³ to develop a structured design approach to "planned" rural community development, and is responsible for development of rural community master plans, as well as a range of national architectural design standards, for rural housing and rural social and community facilities. National design standards, developed by QQL, incorporate modern architectural design, construction technology and materials; and address the full range of regional terrain and climatic conditions and socio-demographic characteristics across the country. National design standards are reviewed by regional design institutes, who then prepare detailed designs that incorporate site-specific requirements and advantage locally source materials. All rural design standards are reviewed and approved by SCAC, as well as by a number of oversight/regulatory agencies,⁴ to ensure compliance with national building and construction standards⁵ prior to their adoption.

8. **Public consultation on RHS house designs.** As an integral part of the RHS public awareness campaign held at the provincial and district level nationwide, the rural public is regularly consulted on national house designs that will be featured in the coming year. National designs are annually reviewed and revised to take into account the public consultation process, feedback from new owners, and to incorporate design improvements. Design improvements include better use of locally sourced materials, cost-saving improvements, and cost-effective technical advancements.

9. During the initial pilot phase of RHS during 2009 and 2010, QQI has assembled an experienced technical team and developed a structured system of procedures to fulfill its mandated technical responsibilities. QQI has engaged and supervised 45 contractors and the construction of 847 new houses in 2009; and 405 contractors and the construction of 6,800 new houses in 2010. In the first quarter of 2011, QQI signed 750 contracts for the construction of 7,400 new houses (Table 2). In addition to QQI's main responsibility for oversight and construction supervision of RHS new houses, which includes coordination of site preparation, it

³ Presidential Resolution PP-1049, "On Establishing Qishloq Qurilish Loyiha Design Research Institute" (LLC), 27 January, 2009.

⁴ Including Fire Inspection Department (assess design for location of doors and windows for evacuation purposes, choice of building materials for flame retardant features, and mapping of access roads and location of fire hydrants for firefighting purposes); Nature Protection Agency (to assess residential housing site for environmental issues, construction approach for environmental impact of construction process including waste storage and/or treatment and/or removal, and solid waste removal arrangements following handover of houses to rural residents); and Ministry of Emergency (ensure design compliance with seismic building standards and evacuation requirements).

 ⁵ National Standard SH NK 1.03.01-03 under State Committee for Architecture and Construction Order No. 89, 29 December 2003 (*On Approval of Project Design for Construction of Buildings*), and National Standard SH NK 2.01.02-04 under State Committee for Architecture and Construction Order No. 82, 28 December 2004 (*On Fire Safety of Buildings*).

is mandated to provide technical support to provincial *hokimiyats* for contractor selection. A brief overview of QQI's technical roles is summarized below.

Table 2: RHS New House Construction 2009 to 2011						
	2009	2010	2011			
Number of new houses	847	6,800	7,400			
Number of contracts	45	405	750			
Average number of houses per contract	19	17	10			
Source: QQB						

10. **Technical support for selection of contractors.** QQI provides technical assistance to the provincial *hokimiyat*s for packaging and initiating the competitive procurement of turnkey contracts for rural housing and community facilities. Packaging of contracts has been organized by province, and based on site location and capacity of local contractors.⁶ For 2011, as detailed in Table 3, there are 372 sites to be managed across 13 provinces (between 15 to 44 sites per province), with 750 contractors to be supervised (between 32 to 90 contracts per province), and 7,400 new houses to be built nationwide (between 310 to 805 houses per province). On average there are 20 houses per site nationwide, with the largest number of houses per site in Tashkent Province at 31 houses, and the smallest number of houses per site in Bukhara Province at 13 houses. On average there are 10 houses per contract nationwide, with the largest number of houses per contract in Namangan Province at 6 houses. A detailed description of the procurement process for selection of contractors, and QQI's role in the process, is provided in Supplementary Document 17.

Province	Provincial Population per RHS House (000's)	No. of Sites	No. of Contracts	No. of Houses	Average No. of Houses per Site	Average No. of Houses per Contract
Karakalpakstan	4.68	24	42	345	14.4	8.2
Andijan	3.76	37	50	665	18.0	13.3
Bukhara	2.76	44	61	575	13.1	9.4
Ferghana	4.48	32	51	675	21.1	13.2
Jizzakh	3.05	19	35	360	18.9	10.3
Kashkadarya	3.18	31	90	805	26.0	8.9
Khorezm	2.69	25	74	570	22.8	7.7
Namangan	3.99	32	90	555	17.3	6.2
Navoiy	1.71	30	54	490	16.3	9.1
Samarkand	4.41	23	75	695	30.2	9.3
Surkhandarya	3.01	38	62	675	17.8	10.9
Syrdarya	2.27	15	32	310	20.7	9.7
Tashkent	3.75	22	34	680	30.9	20.0
Total	3.72	372	750	7,400	19.9	9.9

Table 3: RHS Housing Sites by Province, 2011

Source: QQI, PP-1403

⁶ To better achieve RHS strategic objectives, the average contract package size was decreased from 19 houses per contract in 2009, to 17 houses in 2010, and 10 houses in 2011. During the pilot phase it was determined that a contract size of about 5 to 15 houses is optimal to ensure quality and timely delivery by small contractors in rural areas targeted by the RHS.

11. **Oversight and construction supervision of RHS new houses.** QQI, as an agent of the provincial *hokimiyat*s (the developer), and agent of the home buyers, supervises the contractors and the construction of new rural housing nationwide. QQI is specifically responsible for liaising with all relevant regulatory agencies, and supervising overall construction quality of new houses to ensure adherence to design and building specifications, and national building and construction standards.

12. **Stage 1: Site preparation, mapping of house sites, and preparation of foundations.** QQI closely supervises and regularly interacts with the contractor, particularly during the critical stages of: site preparation (including analysis of soil samples by UzGIITI laboratories, and soil compaction), mapping of housing sites, mapping of utility and infrastructure access, and preparation and sealing of foundations (prepared in accordance with applicable seismic standards). As prescribed by regulation, QQI also closely coordinates the approval of site designs, and inspection by oversight agencies at each critical stage of construction. Compliance of national building and construction standards and norms must be certified, at each predefined stage of construction, prior to the start of the next stage of construction.

13. Stage 2: Erection of walls, roofing, installation of windows, doors, wiring and electrical and plumbing works. Within 7 days following the initiation of construction and installation works, QQI is required to finalize an agreement with QQL or the regional design institution on the process and the schedule for the design inspection, to be undertaken by QQL or the regional design institute, during construction and until the house is commissioned. QQI and QQL or the regional design institute are required to undertake design and technical inspection of residential housing construction in accordance with KMK 1.03.07-96 "Regulation on Design and Technical Inspection of Construction". As outlined by this regulation, it is mandatory for each step of the inspection process to be documented in a "Journal for Design and Technical Inspection of Construction", with any deviations detected during the inspection and follow-up steps needed to be taken, appropriately recorded. Duplicate copies of the journals are maintained, with one copy secured on site and a second copy held in safekeeping at QQL or the regional design institute. A QQI lead specialist is assigned responsibility for supervising a specific contractor or site, and is accountable for maintaining the journal and ensuring timely entry of all observations, and all notes on any discrepancies identified during routine construction supervision and the quality inspection process. The QQI lead specialist is responsibility for supervising the contractor, and undertaking quality checks, to ensure construction works are being implemented on time, and in accordance with the contractor's workplan. It is the QQI lead specialist's responsibility to identify problems or complications, find constructive solutions, follow up on corrective actions, and maintain all required reports on construction progress and construction quality.

14. **Stage 3: Installation of flooring, ceilings, and other finishings, installation of equipment and fixtures, connection to utilities, and landscaping.** The supervision of the construction of each individual house is managed by QQI to ensure contractor compliance with the detailed designs and with national building and construction standards. All changes to original plans and designs, including those requested by the individual home buyer, must be in accordance with national design and building/construction standards and norms, and preapproved by QQL or the regional design firm. Upgrades of finishings, equipment, or fixtures, if preapproved, may be considered if additional costs are fully borne by the homebuyer.

15. **Facilitation of handover of completed new rural houses to homebuyers.** QQI organizes and facilitates commissioning of all new houses constructed under the RHS. Within

five days of receiving the Contractor's Notice of Completion, QQI invites the home buyer to join the Working Group for Commissioning to inspect the house and sign off the Working Group's Document of Acceptance. The Working Group is comprised of QQI, the Contractor, and relevant representatives of regulatory and oversight agencies. Inspection by the Working Group includes inspection of the quality of construction, installations (plumbing, electrical, heating, and ventilation), equipment and fixtures, finishings, and exterior works (walkways, driveways, fences, landscaping, etc.). Upon completion of final inspection, the Working Group's Document of Acceptance is signed by all members of the Working Group. A final commissioning certificate is then issued by the State Building Inspection Commission to the homebuyer.⁷

16. **Homebuyer recourse and new house construction warranty.** Homebuyers have recourse rights against QQL, the contractor, and QQI for any subsequent issues regarding quality of design and construction. QQI is in the process of revising the homebuyer's purchase agreement to improve and outline the RHS grievance and complaint process, and provide details of the one-year new house construction warranty.

⁷ The signed commissioning certificate is signed by all members of the State Building Inspection Commission (i.e., Chairman of the State Building Inspection Commission, *Hokimiyat*, QQI, General contractor, Subcontractors, Operational organization, General designer, State Architectural Construction Inspection, Sanitary office, Fire Inspection Department, Nature Protection, Ministry of Emergency Chief Technical State Labor Inspector, Uzbek Society of Disabled Persons [if needed], Society for the Protection of Consumer Rights, the relevant Council of Federation of Trade Unions, financing bank, and individual developer).