

**INTEGRATED SAFEGUARDS DATA SHEET
APPRAISAL STAGE**

Report No.: ISDSA7007

Date ISDS Prepared/Updated: 22-Aug-2014

Date ISDS Approved/Disclosed: 22-Aug-2014

I. BASIC INFORMATION

1. Basic Project Data

Country:	China	Project ID:	P133018
Project Name:	Zhejiang Rural Water Supply and Sanitation Project (P133018)		
Task Team Leader:	Gang Qin		
Estimated Appraisal Date:	05-May-2014	Estimated Board Date:	25-Sep-2014
Managing Unit:	GWADR	Lending Instrument:	Investment Project Financing
Sector(s):	Wastewater Collection and Transportation (50%), Water supply (20%), Wastewater Treatment and Disposal (30%)		
Theme(s):	Rural services and infrastructure (100%)		
Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)?			No
Financing (In USD Million)			
Total Project Cost:	400.00	Total Bank Financing:	200.00
Financing Gap:	0.00		
Financing Source			Amount
Borrower			200.00
International Bank for Reconstruction and Development			200.00
Total			400.00
Environmental Category:	B - Partial Assessment		
Is this a Repeater project?	No		

2. Project Development Objective(s)

The proposed Project Development Objective (PDO) is to improve access to sustainable water supply and sanitation services in selected villages and towns in rural areas of Zhejiang Province.

3. Project Description

The proposed Bank supported project will have the following three components.

Component 1: Improving Water Supply and Sanitation (US\$ 356 million). This component will invest a total of US\$ 356 million, of which US\$ 193.5 million is from the IBRD loan, for the construction and rehabilitation of water supply and wastewater collection and treatment facilities in the Project Counties. A total of 138 administrative villages (259 natural villages) and 9 rural towns have been identified during preparation, but more villages and towns could be added during project implementation. During preparation, the team has appraised US\$ 169 million in subprojects or about 47 percent of the total allocation for this component. Each county has already received a nominal allocation from the total amount of the loan, and the remaining 53 percent of investments under this component will be identified and appraised during project implementation, batch by batch, in accordance with the framework approach. Changes may happen to these allocations depending on the performance of different subprojects and Project Counties during implementation.

Component 2: Training and Capacity Building (US\$ 2.5 million). This component will be fully financed by the IBRD loan. It will provide specific training and assistance to local water companies to improve their technical, financial, and overall managerial performance, including their technical capacity for operation and maintenance of all WSS systems. The identified and agreed areas of technical assistance support include: (a) training for staff of Project Management Offices (PMO), Project Implementing Unit (PIU) and institutions involved in project implementation; (b) training for staff and operators of water companies participating in the Project to enhance their O&M competency; (c) institutional strengthening and capacity building for water companies participating in the Project; and (d) implementation of a program to monitor and evaluate the performance of wastewater treatment stations in the participating villages.

Component 3: Project Management and Supervision (US\$ 3.5 million). This component is closely linked to the infrastructure investment under Component 1 and will be fully financed by the IBRD loan. It will provide project management assistance to all relevant agencies at both provincial and county level. The identified and agreed areas of technical assistance to be financed by this component include: (a) technical support for the implementation of a framework approach, including reviewing technical reports for subprojects which are eligible for project financing; and (b) support for project management and supervision.

4. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

Zhejiang Province, with total population of 54.6 million (2012), is located in the east coast of China with an area of 105,391 km², of which 70.4% is mountainous areas; 23.2% is plains; and the remainder 6.4% is covered by rivers and lakes. Zhejiang has a sub-tropical monsoon climate, with the clear division of four seasons and abundant sunshine. The average annual temperature is 15°C - 18°C and the average annual precipitation is 1,200-1,800 mm. The proposed project counties are mainly in the mountainous and hilly regions of the Province.

Four counties in the Province have been selected to participate in the project. They are: Anji County, which is located in the northwest of the Province; Fuyang City, which is located in Qiantang River Basin, upstream of Hangzhou; Tiantai County, which is located in mountainous area of central Province. The river system in the County is Jiaojiang River system; and Longquan City, which is in south of the Province. The main river is Oujiang River.

5. Environmental and Social Safeguards Specialists

Chongwu Sun (GENDR)

Zhefu Liu (GURDR)
 Ximing Zhang (GWADR)

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6. Safeguard Policies	Triggered?	Explanation (Optional)
<p>Environmental Assessment OP/ BP 4.01</p>	<p>Yes</p>	<p>Based on the project proposal and preliminary screening and scoping during project identification, this policy is triggered, mainly because of the activities under the component 1.</p> <p>The project will have significant benefits in terms of providing improved water and wastewater services for villages and the townships in the selected counties of Zhejiang Province. Investments under Component 1 include civil works for water supply, drainage, wastewater collection, and treatment facilities, etc.</p> <p>Potential negative environmental and social impacts would mainly occur in the construction phase, and they would include soil erosion, noise, dust, and shipping and disposal of construction waste, etc.</p> <p>Category B is proposed mainly because that the impacts are site-specific and few is irreversible, mitigation measures can be designed during project preparation and applied during implementation.</p> <p>The following environmental safeguards instruments are proposed: An environmental impact assessment (EIA) and a standalone environmental management plan (EMP) will be prepared to cover the entire project. Social impact should be designed as part of the EIA. Furthermore, an environmental and social management framework (ESMF) is proposed, as an annex to the EIA, for sub-projects that are not known by appraisal.</p> <p>During the preparation of the proposed instruments, WBG’s Environmental, Health and Safety Guideline will be an important reference. A due diligence review will be conducted for existing facilities and projects related to the proposed project.</p>

		Public consultation and information disclosure has been conducted following OP4.01 requirements during EIA preparation. At least two rounds of public consultation had been carried out with potentially affected persons and other relevant stakeholders through various methods, e. g., questionnaire surveys, interviews and public meetings as needed. The full final EIA has been disclosed locally.
Natural Habitats OP/BP 4.04	No	There were no natural habitats was found through screening and site survey.
Forests OP/BP 4.36	No	Based on current information, the proposed project components are not located in forest areas. Therefore, this policy is not triggered.
Pest Management OP 4.09	No	The proposed project will not procure pesticides nor will it result in the increased use of pesticides.
Physical Cultural Resources OP/BP 4.11	Yes	There were no physical cultural relics to be found through screening and site survey. Since the chance-find procedure is prepared in the EMP, the policy is triggered.
Indigenous Peoples OP/BP 4.10	No	The project will support selected counties in Zhejiang Province. The task team visited the corresponding villages in these areas and had meetings with the municipal departments in charge of the minority affairs. The task team concluded there is no community of the Chinese minorities identified by the Chinese government in the project area. All of the populations in the project areas are Han people who are not identified by China government as minority and also Han does not fall in the definition of ethnic minority identified by Bank OP 4.10. Thus, OP 4.10 is not triggered.
Involuntary Resettlement OP/BP 4.12	Yes	Some collective land will be required at the township level for waste treatment plants and temporarily during waste water collection pipeline installation. Hence, Bank Involuntary Resettlement Policy OP 4.12 will be triggered. A Resettlement Action Plan is required to mitigate any negative impacts caused by collective land acquisition and temporary land use in the first two years of the project programs. Based on the project features, avoidance to land acquisition, specific to those valuable cultivated, is prioritized at first. Training courses on how to select the sites of waste water treatment plants and the

		alignments of the waste water collection pipelines were provided for the PMO staff and the consulting team. The task team will review the analysis of those site selections. The task team also requested the PMO to mobilize a village committee based project volunteer supporting team consisting of the head of the village committee, the head of the Women associated, highly respected elder because of his/her merit and also representative of the villagers. This team will participate into the project preparation process and later on the monitoring work during civil works. Their roles will be documented in the RAP as a way to enhance local institutional capacity. A resettlement policy framework will be prepared to guide the selection of sub-projects. The RAP and RPF will be prepared and disclosed prior to appraisal.
Safety of Dams OP/BP 4.37	Yes	Although the project does not finance construction of new dams or rehabilitation of existing dams, some of the project financed infrastructures would rely on the proper operation of nine existing upstream dams—Tianzigang, Fenghuang, Laoshikan, and Fushi Dams in Anji City, and Yanzhangxi 1, Yanzhangxi 2, Ruixiang 1, Ruixiang 2, and Zhuyang Dams in Longquan City. Failure of those dams could cause extensive damage to or failure of the new Bank-funded structures. It is assessed that Safety of Dams is triggered.
Projects on International Waterways OP/BP 7.50	No	Not applicable
Projects in Disputed Areas OP/BP 7.60	No	Not applicable

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

<p>1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:</p>
<p>Environmental Safeguards</p> <p>Environmental Assessment: The Bank policy OP 4.01 Environmental Assessment is triggered and the project has been classified as Category B. An Environmental Impact Assessment (EIA) and a freestanding environmental management plan (EMP) were carried out to determine the key environmental impacts, the mitigation measures and environmental monitoring program and necessary institutional arrangement as well as capacity building development. The documents</p>

have been prepared on the basis of Chinese legal and policy framework for environmental protection, master plans and environmental plans as well as applicable Bank safeguard policies and Bank group's Environment, Health and Safety Guidelines.

Through preparation of safeguard documentation, there was no any potential large scale, significant and/or irreversible environmental impacts to be found. From proposed components, following benefits are expected: improve key infrastructure, including water supply and increase/improve wastewater collection and treatment in the selected project towns and villages. It is estimated that about 1.73 million populations would be served by the project, with newly increased water supply capacity 29.24 million tons per year and newly added wastewater collection capacity 53.45 million tons per year. Furthermore, it is expected that 12171 tons of COD and 5667 tons of BOD would be reduced annually when collected wastewater to be treated.

The major negative environmental impacts are expected short term mainly during project construction phase, including dust, noise, traffic interruption, etc. For operation phase, management capacity at local level would be a key issue.

There were no physical cultural relics to be found through screening and site survey. Since the chance-find procedure is prepared in the EMP, the policy is triggered.

Safety of Dams (OP 4.37). The project triggers the Safeguards Policy on Safety of Dams (OP4.37). Although the project does not finance construction of new dams or rehabilitation of existing dams, some of the project financed infrastructures would rely on the proper operation of nine existing upstream dams—Tianzigang, Fenghuang, Laoshikan, and Fushi Dams in Anji City, and Yanzhangxi 1, Yanzhangxi 2, Ruixiang 1, Ruixiang 2, and Zhuyang Dams in Longquan City. Failure of those dams could cause extensive damage to or failure of the new Bank-funded structures. Those dams are from 8m to 89m by height, 2.1 million cubic meters to 218 million cubic meters by reservoir capacities, they were built from 1976 to 2011. The PMO has hired one independent dam safety expert (DSE) to (a) inspect and evaluate the safety status of existing dams, their appurtenance, and performance history; (b) review and evaluate the owner's operation and maintenance procedures; and (c) provide written reports of findings and recommendations for any remedial work or safety-related measures necessary to upgrade the existing dams to an acceptable standard of safety. The DSE has prepared a Dam Safety Review Report and sent to the Bank. The PMO would also assign special staff to assist the Bank team to ensure the project is implemented in line with the OP4.37. Dam safety plans and emergency preparedness plans have been prepared for the existing dams. During the implementation, the Borrower will prepare Annual Dam Safety Action Plans and provide relevant dam safety information to the DSE and the Bank and arrange field trips when necessary to review safety status the relevant dams, and take dam safety measures recommended by the DSE to improve the safety status when necessary to ensure the safety of dams.

Social safeguards

The project has significant social benefits to rural populations. It supports the rural sanitation service delivery in selected around 150 village communities in 4 cities/counties in Zhejiang Province. At this stage, 78 village communities in the four cities/counties were selected. Four resettlement action plans (RAP) were prepared to address the land acquisition and resettlement in the engaged 4 cities/counties and a consolidated RAP was prepared to brief the main contents of those 4 RAPs. A resettlement policy framework was prepared to guide the resettlement activities

for the second stage of the selected village communities. The RAPs provided details on resettlement policy procedures and requirements that will have to be followed during project implementation, including compensation rates, mitigation measures to restore livelihoods, and institutional and monitoring arrangements. The RAP has been disclosed through Bank's InfoShop on April 14, 2014.

The project will require the permanent acquisition of 6.1 hectares of land, including 3.3 hectares of cultivated land and 2.8 hectares of State owned land. The dominant current land use is growing rice. 78.8 hectares of land will be used temporarily during the pipeline installations. The project will require 24,418 square meters of structures, including 6,976 square meters of rural structures and 17,442 square meters of enterprise structures. As the result, the project will impact 518 populations by permanent land acquisition and resettlement, and 1,163 populations by temporary land use. No tombs were affected.

The task team undertook screening to the minority communities in the project areas. The project area is Han population centralized area without any Chinese minority community in the project area and Han population is not identified as minority by the Bank. The task team concluded that there are no Indigenous Peoples as identified by the Bank are present in, or have collective attachment to the project area.

The task team conducted due diligence reviews and concluded that no local funded linkage projects within two years prior to the project identification were identified.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

As designed, the proposed project will improve key infrastructure and public utility facilities in the project areas, including water supply, and increased/improved wastewater collection and treatment.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

Environmental: Alternatives were mainly considered during the project feasibility study and EIA preparation mainly onas "with and without" project analysis and option comparison for wastewater treatment technologies, which supported the rural wastewater collection and treatment program.

Social: Alternative study was considered at the resettlement action plan, e.g. select the sites of waste water treatment plants on the unused land, or hilly land, or less outcome of cultivated land; install the pipelines along roads or less outcome of cultivated land. Comprehensive comparisons were analyzed with consideration of technical, economic, as well as environmental and social factors.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

Environmental:

The EIA report, prepared by the client and their EA consultants, thoroughly addressed the potential environmental and social impacts envisaged for the project, and developed adequate measures in the EMP to avoid, minimize, mitigate and compensate the potential adverse impacts. The preparation of EIA followed the relevant national laws/regulations and guidelines, as well as Bank's safeguards policies and environmental health and safety (EHS) guidelines.

The major negative environmental impacts are expected short term mainly during project construction phase, including dust, noise, traffic interruption, disturbance to rivers/streams, short term water quality degradation, soil erosion, and shipping and disposal of construction waste etc. A stand-alone EMP has been prepared based on the findings of the EIA report. The EMP summarized the key environmental impacts and detailed the environmental management and supervision organizations and responsibilities, mitigation measures, training plan, monitoring plan, and budget estimates of EMP implementation. It includes sets of Environmental Codes of Practice (ECOPs) for contractors, which will be incorporated into bidding documents and contracts to ensure effective implementation.

The project would support rural wastewater collection and treatment in about 300 villages. The environmental impacts are as similar as mentioned above. The assessment was carried out for the villages that were selected as the first batch (shortlisted), as detailed in the EIA report. For those villages (long list) that will be determined during project implementation, an environmental management framework has been prepared and included, as a chapter, in the EIA and EMP.

The EMP also includes environmental monitoring programs for both construction and operation phases. The parameters to be monitored include noise, dust, and water quality. To ensure the strict and efficient implementation of the mitigation measures proposed, including environmental obligations during construction, a program of monitoring activities has been developed as part of the EMP. Furthermore, chance-find procedure is included in the EMP to ensure the relics, which are discovered during construction, to be protected properly according to relevant national and Bank's policies and regulations. The project progress reports furnished by the PMO will include a section for EMP implementation and related environmental monitoring reports. In addition, training would be provided to the operators to ensure long term and effective operation of the facilities built under the project.

Social: The provincial PMO contracted experienced social safeguards institute to guide the social safeguards documentation. The resettlement implementation offices were set up in the engaged cities/counties active to participate into the resettlement impact survey, public consultations. The staffs from the PMOs and agencies are getting familiar to the Bank requirement, specific to the safeguards requirement.

The social safeguards consultants worked with the design institute in charge of project feasibility study on the selections of the waste water treatment plants and roadmaps of the pipelines. The analytical works were undertaken and the project negative impacts were minimized, and the mitigation measures were developed according to the Bank requirement. The RAPs covering the key resettlement information in project cities/counties were approached. A resettlement policy framework was prepared to guide the second stage of the project and any project component changes that might cause the resettlement and land acquisition and local funded projects that will be linked to the Bank supported project prior to the Close of the Bank loan.

Public consultation was the key element to inform the public and receive their feedbacks. The public consultations were undertaken by the consulting institute and the project entities in the project cities/counties to address the importance of the safeguards policy based on the stages of the project preparation. The project preparation was a well-done process to disseminate the Bank requirement on social safeguards and incorporated people's concerns into the RAPs and also an important process to provide on-job training courses to the engaged agencies in project cities/

counties.

An experienced monitoring consulting firm, independent to the PMO and the project agencies, will be contracted to monitoring the resettlement activities and the monitoring report will be reviewed by the Bank twice a year as requested.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

Environmental:

Two rounds of public consultations were carried out during the EA process. The technique used for the public consultations include surveys using public opinion questionnaires, focused group discussions, public meetings with key stakeholders and interviews with some project affected persons. The issues raised during these consultations have been incorporated in the EIA and EMP. Furthermore, feedbacks to the concerns and issues collected in public consultation have been provided to the concerned groups and documented in the EA. The EIA and EMP documents and other project related documents have been disclosed locally through websites and local newspapers on March 7, 2014, as required by national and Bank's policies. The English language EIA and EMP have been disclosed through Bank's InfoShop on April 10, 2014.

Institutional arrangement also was determined in the EIA and EMP. Zhejiang Provincial PMO will take overall responsibility to coordinate and oversee the EMP implementation, including management and supervision, training, and preparation of project progress report based on the reports and monitoring information from each project county, etc. Each county PMO will take respective responsibility for EMP implementation, including hiring qualified environmental expertise for environmental monitoring, supervising contractor to implement the mitigation measures, promoting good practice of environmental protection measures and technologies. With related mitigation measures and clauses to be incorporated in the bidding documents and contracts, contractors will have obligation and mandates to implement the EMP.

Social:

The social assessment was undertaken. Local people's concerns were incorporated into the project design and mitigation measures were appropriately undertaken to reduce the negative impacts caused by land acquisition and resettlement relocation. The affected people considered that the project would improve their family living standards and village sanitations. The project stakeholders are the local communities and the people in the engaged cities/counties. The affected people considered the project will give them opportunities to have better living environment and develop their businesses for future tourism at village community basis.

Gender analysis was done well. A disaggregated gender analysis in the affected village/community was undertaken by Hehai University with support from local agencies, listening to women's expectations, and collecting ideas and recommendations that were incorporated in the designs of the project. Gender disaggregated information were also collected and used in the RAP to ensure that women's interests could be safeguarded during any resettlement implementation. Women will play increasable important roles in the project implementation. The task team and resettlement monitoring institute will continue to monitor gender impacts during project implementation. The project is consistent with the Bank's approach to promote inclusion as a tool to help increase productivity and reduce disparities. The population currently living in rural villages is mostly

comprised of women who have stayed back to take care of the family due to the migration of young and middle-age men. In this connection, the project will explore the possibility of providing training for women so that they can assist with the basic maintenance of assets created under the project which could also provide an additional source of income for women.

During the project preparation process and the stages of the project design, public consultations were conducted and will be continuous by the resettlement offices in the engaged cities/counties and also the independent monitoring agency. The project information was disseminated to the displaced families for refining the project design, selections of the project components and the locations of the subprojects.

The RAP, resettlement policy framework in the engaged counties/districts were disclosed and sent to Infoshop on April 14, 2014.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	21-Mar-2014
Date of submission to InfoShop	10-Apr-2014
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
"In country" Disclosure	
China	18-Mar-2014
<i>Comments:</i>	
Resettlement Action Plan/Framework/Policy Process	
Date of receipt by the Bank	18-Mar-2014
Date of submission to InfoShop	14-Apr-2014
"In country" Disclosure	
China	14-Apr-2014
<i>Comments:</i>	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why:	

C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment	
Does the project require a stand-alone EA (including EMP) report?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
OP/BP 4.11 - Physical Cultural Resources	

Does the EA include adequate measures related to cultural property?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
OP/BP 4.12 - Involuntary Resettlement	
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
OP/BP 4.37 - Safety of Dams	
Have dam safety plans been prepared?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?	Yes [<input type="checkbox"/>] No [<input type="checkbox"/>] NA [<input checked="" type="checkbox"/>]
The World Bank Policy on Disclosure of Information	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
All Safeguard Policies	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have costs related to safeguard policy measures been included in the project cost?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]

III. APPROVALS

Task Team Leader:	Name: Gang Qin	
<i>Approved By</i>		
Practice Manager/ Manager:	Name: Ousmane Dione (PMGR)	Date: 22-Aug-2014