Projects Applying for Chinese Government Assistance Project Proposal (format)

1. Basic Information of the Project

- (1) Name of the Project Strengthening technical capacity of infectious diseases control service in Georgia
- (2) Project types Technical Assistance
- (3) Applying country Georgia
- **(4) Authorities in charge** Ministry of Labour, Health and Social Affairs of Georgia; End-user: Infectious Diseases, AIDS and Clinical Immunology Research Center (IDACIRC)
- (5) Background information of the Project

The goal of the proposed project is to strengthen technical capacity of infectious diseases control service in Georgia though equipping country's referral institution. The overall outcome of the project will be improved control of infectious diseases in Georgia. Improvement in diagnostic and management capabilities will translate into overall improvement of management of patients, especially of those with severe clinical conditions. People living with HIV represent patient population that will particularly benefit from this project. HIV remains incurable chronic infection and even with effective antiretroviral therapy HIV patients develop various infectious and non-infectious co-morbidities that require hi-tech approaches for optimal management. Chinese Government Assistance will be crucial for achieving goal of establishing infectious diseases control system of modern type.

2. Necessity for the implementation of the Project

(1) The significance of the political, economic and social development of the implementation of the Project for the recipient country

Infectious diseases remain to be a significant global burden in the whole world and in Georgia as well. There is a continuous risk for emerging and re-emerging infectious diseases, outbreaks and epidemics, including well-identified threats and diseases such as influenza, HIV/AIDS and viral hepatitis. It should be mentioned that the number of people living with HIV is growing annually and half of newly diagnosed patients are diagnosed with advanced immunodeficiency manifested by conditions requiring comprehensive out-patient and in-patient care.

In view of the heavy HCV burden in the country the Ministry of Labour, Health and Social Affairs of Georgia put Hepatitis C high on its political agenda. Since 2013, the Ministry stepped up its efforts to combat this extremely dangerous public health threat through elimination of Hepatitis C in the whole country, took critical steps towards achieving the goal and still remains committed to expand access to and affordability of effective antiviral regiments to all patients in need of treatment.

In 2014 Minister of Labour, Health and Social Affairs of Georgia launched unprecedented Hepatitis C Elimination Programme in Georgia. In resulting, the number of registered patients has been rapidly increased. Through universal access to HCV diagnostics and treatment, HCV burden in Georgia will be eliminated. In view of that, it's highly important to ensure high-quality diagnostic and treatment through service providers. One of the leading public health institution is Infectious Diseases, AIDS and Clinical Immunology Research Center (IDACIRC) which provides HCV patients with diagnostic and treatment

services and to strengthen its technical capacity is of high importance.

(2) The consideration of the linkup between the Project and the development plan of the recipient country

Public health care, particularly management of infectious diseases is one of the key directions of the Ministry of Labour, Health and Social Affairs of Georgia. The Government of Georgia elaborated relevant legislative base to ensure infectious diseases control, accessibility to the appropriate diagnostic and treatment service.

By the Decree №660 of the Government of Georgia of December 30, 2015 on "Approval of the 2016 Health Care State Programmes" has been adopted "Infectious Disease Management" state healthcare programme, which aims to increase accessibility of inpatient treatment of communicable diseases among Georgian population. The beneficiaries are citizens of Georgia, foreign citizens permanently residing on the territory of Georgia and persons without citizenship. The leading service provider under the Decree is the Infectious Diseases, AIDS and Clinical Immunology Research Center.

The Government of Georgia approved Decree N1807 of October 1, 2014 on "Approval of the Urgent Response Plan on the Diseases Caused by the Ebola Virus". According to the Article 6 of the Plan for the purpose of case management preparedness the Infectious Diseases, AIDS and Clinical Immunology Research Center has been defined as a priority institution and the treatment of the emerged cases of Ebola virus will be conducted in the mentioned Center.

National Strategy of 2016-2018 on HIV/AIDS Prevention and Control has been elaborated in close collaboration with the Infectious Diseases, AIDS and Clinical Immunology Research Center, since the IDACIRC is a leading institution responsible for AIDS treatment services in the country. The IDACIRC also coordinates HIV/AIDS patients care and social assistance service provision in Georgia.

3. The specific content of the Project

(1) Investment scale of the Project (Investment estimation and calculation tables should be included)

Approximately **4,970,000** USD

(2) The main content of the Project/List of materials of the Project

List of necessary equipment

Item	Unit cost	QTY	TOTAL
X-ray scanner stationary	390,000	1	390,000
X-ray scanner portable	151,000	1	151,000
CT scanner	700,000	1	700,000
MRI scanner	1,300,000	1	1,300,000

Ventilation and respiratory monitoring machine	51,800	7	362,600
Universal ultrasound system	43,600	2	87,200
Monitoring system for ICU department (set for 12 beds)	161,000	1	161,000
Endoscopic devices (video-grastroscope, vide-colonoscope, video-bronchoscope)	150,000	1	150,000
System for aphaeresis	46,000	1	46,000
System for long-term kidney replacement therapy in acute care and for intensive care	110,000	1	110,000
System for liver and kidney replacement treatment	91,400	1	91,400
High-throughput (next generation) sequencing system	485,000	1	485,000
Flow-cytometer system	248,500	1	248,500
Automated immunoassay analyzer	93,500	1	93,500
Blood gas and electrolyte analyzer	51,500	1	51,500
ELISA system (reader, washer, incubator)	23,800	1	23,800
Centrifuge with refrigerator	7,800	1	7,800
Microplate centrifuge	20,600	1	20,600
Standard centrifuge	6,400	2	12,800
Variable single-channel pipettes	430	20	8,600
Variable multi-channel pipettes	500	12	6,000
Medical refrigerator	4,100	7	28,700
Medical freezer	15,000	3	45,000
Laboratory and clinical furniture	335,000	1	335,000
Vehicle	18,000	3	54,000
TOTAL			4,970,000

(3) The location of the Project and its basic information

Infectious Diseases, AIDS and Clinical Immunology Research Center (IDACIRC) is located in the central part of the capital of Georgia (address: 16 Kazbegi ave., Tbilisi, Georgia. web page: www.aidscenter.ge). IDACIRC is responsible for development, implementation and coordination of the activities against HIV/AIDS epidemic spread in Georgia. IDACIRC is Georgia's referral institution for diagnosis, treatment and care of all infectious diseases, except tuberculosis. The Center is responsible for implementation of the "Sub-program on HIV/AIDS Management" adopted by the Decree Nº660 of the Government of Georgia of December 30, 2015 on "Approval of the 2016 Health Care State Programmes".

IDACIRC has also been responsible for laboratory component of the national program on hepatitis C treatment in penitentiary system of Georgia since 2014. Since 2015 IDACIRC is actively involved in the development and implementation of the National Hepatitis C Elimination Program.

The main directions of activities include:

- HIV/AIDS
- Viral hepatitis
- CNS infections
- GI infections
- Airborne infections
- Especially dangerous infections
- Epidemic preparedness

The Center is the single largest provider of infectious disease services in the country. Only in 2014 IDACIRC provided out-patient care to 6,239 and in-patient care to 5,094 patients excluding HIV positive persons. Specific HIV/AIDS related care was provided to 2,619 outpatients, which is approximately 70% of total number of people living with HIV in Georgia. The Center is also leader in providing care for viral hepatitis and particularly hepatitis C – in 2014 1,978 HCV patients received outpatient services and the numbers will substantially increase as national hepatitis C program fully rolls-out.

IDACIRC plays a key role in national epidemic preparedness and response activities, including recent outbreaks of measles and enteroviral meningitis registered in Georgia in 2013 and 2014 respectively. In 2009-2010 IDACIRC provided care to more than 3,000 patients during the flu pandemic. The Center provided care to 2,956 patients with measles (1,345 outpatients, 1,611 hospitalized), which is 38% of total cases of measles registered in Georgia during 2013 outbreak. During the outbreak of enteroviral meningitis in Spring 2014, IDACIRC provided care to 304 patients, which is more than half of total cases officially registered during this outbreak.

IDACIRC serves as referral institution for managing infections caused by especially dangerous pathogens. Over the recent period the Center provided care to 131 patients with anthrax, 33 patients with Crimean-Congo hemorrhagic fever and 25 patients with hantavirus infection. Interestingly, quite recently cases of human infection with a zoonotic orthopoxvirus was identified in the Center, which is the first description of such infection. In the wake of expanding Ebola epidemic, the Government of Georgia designated IDACIRC as country's referral institution for managing patients with Ebola if such cases were identified (Governmental decree #1807 of October 1, 2014).

IDACIRC has made substantial contribution to the development of the field of infectious diseases in Georgia. It has conducted pioneering work by implementing novel diagnostic and treatment approaches, by conducting innovative research studies in infectious diseases and by delivering high-quality medical education. Center's achievements have been acknowledged by several high-level international and national awards. In 2009, the Center was awarded WHO's Dr. LEE Jong-wook Memorial Prize for Public Health for its outstanding contribution to the research and prevention, treatment and control of HIV/AIDS, and research and control of communicable diseases – as stated in the resolution of the Executive Board of the World Health Assembly (EB124/DIV/3).

Currently, technical capacity of IDACIRC requires substantial strengthening, including necessary equipment, which is essential for successful diagnosis and management of serious infectious diseases and their complications. For example, there is lack of radiology diagnostic capacity such as X-Ray, CT scan and MRI in the Center. Intensive care department of country's referral ID institution is not equipped with the central monitoring system and there is need for ventilation machines. The Center is not able to provide high-technology interventions using extracorporeal therapy (apheresis, continuous kidney replacement therapy, hemofiltration, liver replacement therapy and etc.) for patients with severe condition including, sepsis, viral hepatitis related liver cirrhosis and failure, kidney failure and other serious complications. There is also need to strengthen laboratory diagnostic capacity, including modern molecular diagnostic systems. IDACIRC is involved in outreach activities, which identified the need for means of transportation. All above mentioned services are generally available in the country, however transportation of infectious diseases patients to other hospitals is not usually possible because of infections control issues, severity of the patients' condition and financial burden.

In conclusion, IDACIRC is Georgia's leading infectious diseases institution of strategic importance, therefore strengthening its technical capacity is vital for effectively responding to infectious diseases threats in the country.

(4) The main function and purpose to be reached by the Project

Through implementation of the project with Chinese Government Assistance, 100% of patients referring to IDACIRC and requiring instrumental diagnostic services, including radiological diagnostics, will receive them in accordance with nationally approved protocols. Also, 100 % of patients will be able to receive laboratory diagnostic services, including sophisticated molecular and immunological diagnostics; Diseases outcomes of patients with severe conditions will be improved; More than 90% of people living with HIV remain on antiretroviral therapy 12 months after its initiation.

4. Other requirement of aid

- (1) Supporting conditions required for the implementation of the Project (such as municipal administration, road, water and electricity supply, land acquisition, housing demolition and relocation, environmental assessment and the requirement for the follow-up operation and maintenance of the Project). N/A
- (2) The feasible and reasonable time recommended for the implementation of the Project. 12 months
- (3) Requirement for the implementation mode (Implemented by Chinese side or by the recipient country). The details on project implementation mode will be agreed upon the parties through consultations.

(4) Suggestion of responsibilities for both parties.

The Ministry of Labour, Health and Social Affairs of Georgia takes responsibility to support implementation process of the project through undertaking necessary activities within the competences of the Ministry of Labour, Health and Social Affairs of Georgia and efficient coordination among the Chinese Government, end-user and other involved stakeholders from Georgian side.

The Chinese Government takes responsibility to fulfill requirements under the project proposal.

- 5. The follow-up operation and maintenance program of the Project
- (1) The responsible party and sources of funds for the follow-up operation and maintenance of the Project after its completion.

Infectious Diseases, AIDS and Clinical Immunology Research Center (IDACIRC)

(2) Whether it needs the Chinese side to provide support of operation, maintenance and training for a certain time. If it needs, how long it is and the estimated cost.

It is desirable to implement the project in two directions: the first is the procurement of high quality equipment based on needs assessment. The second is provision of technical assistance in terms of selecting the equipment and in terms of training of local personnel on maintenance. Overall, this support will be translated into improved diagnostic and management capacity of infectious diseases for the benefit of entire Georgian population.

6. Other related fact sheets about the Project