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Ex-post Evaluation Report on the Project for Modernization of the Traffic Management System in Erbil

한국국제협력단

발간등록번호

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2013. 12



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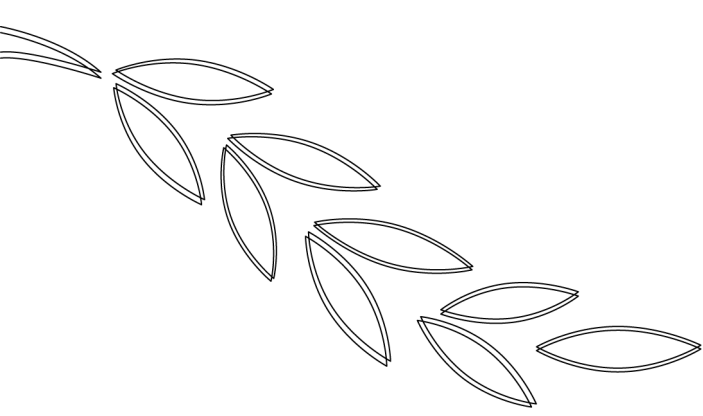
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Evaluation Score Table (Results)

Evaluation Score Table (Results)

1. Project Subject to Evaluation:

Ex-post Evaluation Report on the Project for Modernization of the Traffic Management System in Erbil

2. Evaluation Score for Each Item

○ Relevance: ③, 2, 1 (Very Relevant)

- Reasons: It is deemed to have been "Very relevant" as it was consistent with the development strategies of the recipient country such as reducing corruption, unlawful acts traffic accidents and modernizing the system; contributed to the reinforced sense of ownership in the recipient country with the government endeavoring to make an effort in the maintenance and repair process rather than simply relying on KOICA's support; was expected to contribute to the decline of traffic accidents resulting from private vehicles driven by the residents of Erbil and KRB and the subsequent social costs; and contributed to the resolution of problems such as unlawful acts and corruption with the introduction of a new driver's license testing system.

○ Effectiveness/Impact: ③, 2, 1 (Very Effective, Positive)

- Reasons: It is deemed to have been "Very effective" with a positive impact, considering that it has changed the traffic situation in the Erbil region with the institution changes resulting from the introduction of the new system and taking into account the opinions of the interested parties and KRG experts as well as degree of satisfaction and opinions of the employees of the test courses notwithstanding the fact that it has been 6 years since the end of the project and the follow-up evaluation.

○ Efficiency: 3, ②, 1 (Partially Efficient)

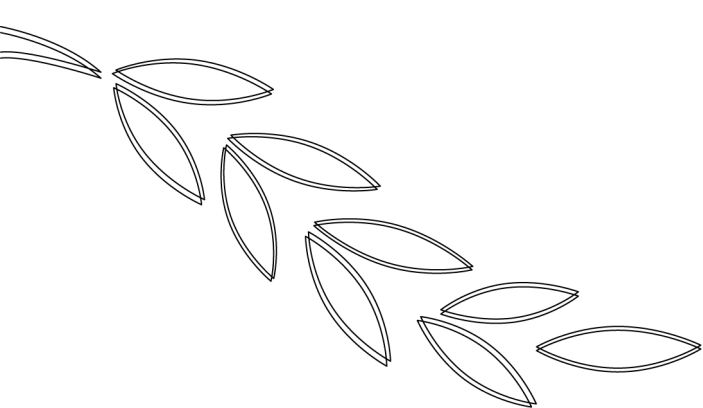
- Reasons: It is deemed to have been "Partially Efficient," considering the fact that the vehicle registration office and license plate manufacturing site are currently idle as a result of the failure to appropriately respond to the policy changes with respect to the vehicle registration and license plate management, etc. during project implementation notwithstanding the fact that the project was completed within the designated time period, while meeting the initial requirements set forth by KRG, and the results are encouraging with the number of daily users doubling to about 700 on average compared to when the Driving Skills Test Center (DTC) was first established.

○ Sustainability: ③, 2, 1 (Very Sustainable)

- Reasons: It is deemed to be "Very Sustainable," considering the fact that the number of daily users has more than doubled since the beginning; the employees of the test course including the director and the major officials at KRG are making an effort to resolve any arising issues in order to maintain normal operation through ongoing maintenance and repair; and the government is planning to introduce an upgraded system to other regions based on the Erbil DTC as its model and reviewing budget allocation.

3. Comprehensive Result: Very Successful

Based on the above results, this project is deemed to have been "Very Successful."



Summary



Summary

1. Overview

The Project for the Construction of a Motor Vehicles Office in Erbil, subject to evaluation (hereinafter referred to as the 'target project'), was conducted with an aim to modernize the driver's licensing system with the introduction of an advanced traffic management system by the Kurdistan Regional Government (KRG), and the project encompassed the construction of new DTC building and vehicle registration office building, supply of materials and equipment, education and training for test course managers and employees in Korea, and dispatch of vocational training experts.

2. Survey Method

- The survey aimed to evaluate the final outcomes of this project by systematically evaluating the outcomes resulting from entire processes from planning to final output based on the performance evaluation criteria set forth by OECD Organisation for Economic Co-operation and Development (DAC).
- OECD DAC recommends that the prescribed evaluation principles and criteria be applied for developmental support evaluation as a means to continually improve the outcomes of aid provision, and the evaluation principles include relevance, efficiency, effectiveness, impact, sustainability and cross-cutting issue.

- For the purpose of evaluation, various qualitative and quantitative data were obtained from the results of domestic research (literature review) and field survey (literature review, questionnaire-based survey, interview, on-site inspection of the operation processes, etc.) in order to perform the evaluation. Analytical and statistical analyses were conducted based on the expertise and experience of the investigators, and the subsequent results and the data obtained through field observation were used for a triangulation test to reach a final conclusion.

3. Summary of Survey Results

- The survey results in terms of the evaluation criteria can be summarized as follows:
 - First, in terms of "relevance," the "target project" is deemed to have been relevant as it satisfied the demands of the recipient country and was consistent with the strategies of the donor country, and it was implemented in a timely fashion to reinforce the government capacity in the developing stage of KRG.
 - Second, in terms of "effectiveness/impact," the target project is deemed to have been very effective with a positive impact as it reduced local corruption with the introduction of a new institution and system and subsequently contributed to the decline in traffic accidents and the public becoming more traffic-conscious.
 - Third, in terms of "efficiency," the target project is deemed to have been very efficient as it met the deadline, faithfully reflected the demands of the recipient country, and produced socioeconomic values through the operation of DTC.
 - Fourth, in terms of "sustainability," the target project is deemed to be sustainable as it is applicable to other regions of Iraq and the Middle East based on the results of the employee survey and the current need for

system extension in Erbil and nearby regions to meet the sharp increase in demand for driver's license acquisition.

- Fifth, in terms of "cross-cutting issue," the target project is deemed to have been very successful as it has heightened the anticipation for increased awareness of gender equality and improvements in women's rights in Iraq; contributed to the reduction in political and socioeconomic costs as a result of the decline in corruption and the improved traffic awareness and decline in traffic accidents, respectively; is expected to contribute to ICT development and job creation; and has set a direction for future environmental improvements.

4. Major Conclusions and Policy Proposal

- The major conclusions and policy proposal based on the evaluation results are as follows:
 - First, the building construction was completed as planned, but the policy effect can be maximized only when this is accompanied by the effort on the part of the government of the recipient country to make the necessary preparations for normal operation as well as its intent to actively operate the system.
 - Second, considering the nature of recipient countries to rely on the donor countries, there is a need to guarantee the efficiency of subsequent operation by setting clear limits with respect to maintenance and repair and securing the necessary budget.
 - Third, there is a need to conduct a sufficient preliminary survey on the current infrastructure and literacy of the recipient country as there have been cases in which the written test was marked manually, instead of employing the OMR card system provided by the donor country.



I . Evaluation Overview

1. Background
2. Purpose and Scope of Evaluation
3. Target of Evaluation (Characteristics, Project Background, etc.)



Evaluation Overview



1. Background

- A DTC(Driving Test Center) implementing an electronic scoring system was built in Erbil, one of the cities under the jurisdiction of the Kurdistan Regional Government (KRG), as part of the post-war reconstruction project conducted in Iraq.
- This was conducted as an ODA project based on the request of KRG, which aimed to prevent corruption and unlawful acts that can potentially result from operating a driver's licensing system using the conventional manual scoring method and to respond to the sharp increase in the population, vehicles and demand for driver's license acquisition.



2. Purpose and Scope of Evaluation

a. Purpose of Evaluation

- To assess the mid- and long-term outcomes resulting from the Project for the Construction of a Motor Vehicles Office in Erbil and the operation of DTC
- To make a proposal for the successful implementation of the traffic management system and to derive strategic lessons

b. Scope of Evaluation

<Table 1: Scope of Evaluation>

		Description
Process Evaluation	Relevance	<ul style="list-style-type: none"> ○ Relevance to the policies and strategies ○ Relevance of the project (meeting the needs of the recipient country, selection of benefiting region, project elements, etc.)
	Efficiency	<ul style="list-style-type: none"> ○ Efficiency in terms of project budget, schedule and implemented technologies in comparison with the aid projects performed by other institutions ○ Efficiency of the project implementation structure
Performance Evaluation	Effectiveness	<ul style="list-style-type: none"> ○ Effectiveness of the reconceptualization of the performance-based model and the extent of mid- and long-term performance
	Influence and Impact	<ul style="list-style-type: none"> ○ Assessment of the long-term impact and goal attainment ○ Assessment of the unintended or indirect impact
	Sustainability	<ul style="list-style-type: none"> ○ Assessment of the potential application in other regions ○ Exit strategy

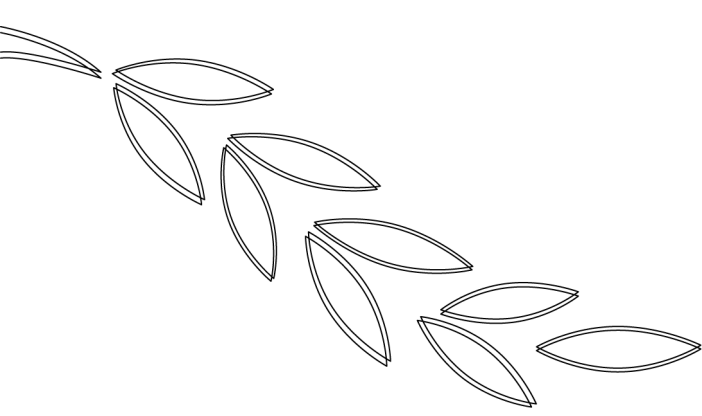


3. Target of Evaluation (Characteristics, Project Background, etc.)

The target of this follow-up evaluation is the Project for the Construction of a Motor Vehicles Office in Erbil.

<Table 2: Overview of the Project for the Construction of a Motor Vehicles Office in Erbil>

		Description	
Project title	Korean (literal translation)	Erbil Traffic Management System Modernization Project	
	English	The Project for the Construction of a Motor Vehicles Office	
Purpose		To introduce an advanced traffic administrative system by modernizing the traffic management system	
Responsibilities	Korea	Assistance in construction	<ul style="list-style-type: none"> ▪ Driver's license issuance and vehicle registration office ▪ DTC ▪ Vehicle inspection and license plate manufacturing site ▪ Parking lot for applicants
		Donation of materials and equipment	<ul style="list-style-type: none"> ▪ Driver's license data system, PCs and network equipment, etc. ▪ License plate manufacturing equipment
		Education and training	<ul style="list-style-type: none"> ▪ Education on the driver's licensing system ▪ Education on the vehicle registration process
		Dispatch of experts	<ul style="list-style-type: none"> ▪ Experts in the driver's licensing system
	Iraq	<ul style="list-style-type: none"> ▪ Provision of land for building construction ▪ Customs clearance for donated materials and equipment ▪ Administrative and personnel support for project implementation ▪ Operation and maintenance of the driver's licensing management building 	
Target Region		<ul style="list-style-type: none"> ▪ Erbil, Iraq 	
Project Scale / Period		<ul style="list-style-type: none"> ▪ 5 million USD / 3-year period (2005-2007) 	
Beneficiaries		<ul style="list-style-type: none"> ▪ Ministry of Interior KRG and vehicle owners 	
Expected Results	Korea	<ul style="list-style-type: none"> ▪ Export the related supplies and services and create a foundation for the expansion of domestic companies into the Iraqi market ▪ Promote the safety of Korean troops in Iraq by instilling a positive perception of Korea among local residents and performing peace-keeping activities 	
	Iraq	<ul style="list-style-type: none"> ▪ Minimize road casualties and fatalities and improve the traffic environment ▪ Contribute to the increase in social overhead capital such as traffic management facilities, etc. 	
Operators	Korea	<ul style="list-style-type: none"> ▪ Korea International Cooperation Agency (KOICA) 	
	Iraq	<ul style="list-style-type: none"> ▪ Traffic Office, General Directorate of Traffic, Ministry of Interior KRG 	



II . Evaluation Method and Procedure

1. Evaluation Model
2. Evaluation Items and Method
3. Limitations and Constraints of Evaluation
4. Domestic and Overseas Research and Survey Methods
5. Division of Work and Schedule (Evaluation Team)



II

Evaluation Method and Procedure



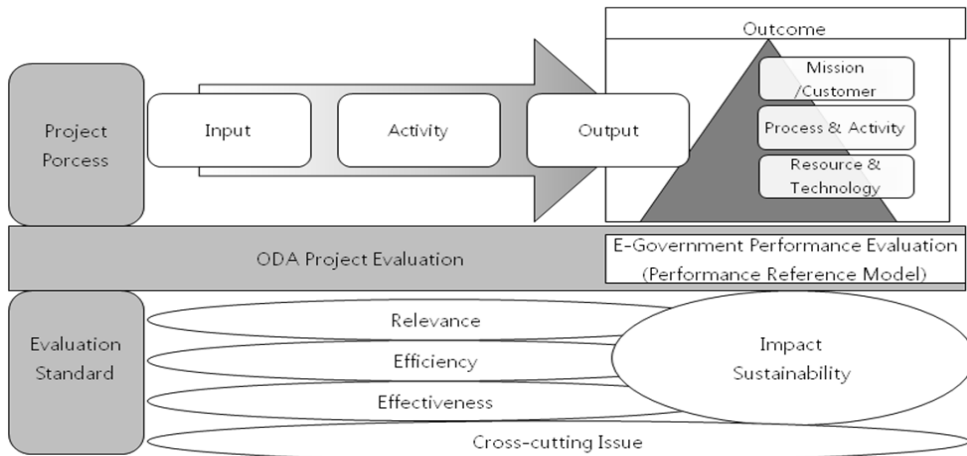
1. Evaluation Model

a. Overview of the Evaluation Model

- Because the follow-up evaluation of official development assistance (ODA) projects is generally conducted after some time has elapsed following project completion, the evaluation must be conducted in terms of the ODA demands and the project content.
 - In other words, the outcomes arising from the time point between the ODA request from the recipient country and the project completion by the donor country should be evaluated in terms of the ODA demands, while the outcomes arising from the time point between the project completion and the follow-up evaluation should be evaluated in terms of the project content.
 - As for the evaluation criteria, the OECD/DAC Criteria for Evaluating Development Assistance (hereinafter referred to as OECD/DAC Criteria) may be applied for the former case, while a separate set of criteria should be applied for the latter according to the nature of the project.
 - The follow-up evaluation of the electronic government (e-Government) ODA project is generally conducted based on the OECD/DAC Criteria, but there must be separate evaluation criteria set forth based on the nature of the project. This follow-up evaluation, in particular, was conducted using the performance reference model (PRM).
 - The processes involved in this follow-up evaluation, performed in accordance

with these evaluation criteria, can be represented in a diagram as follows:

<Fig. 1> Conceptual Diagram of the Follow-up Evaluation



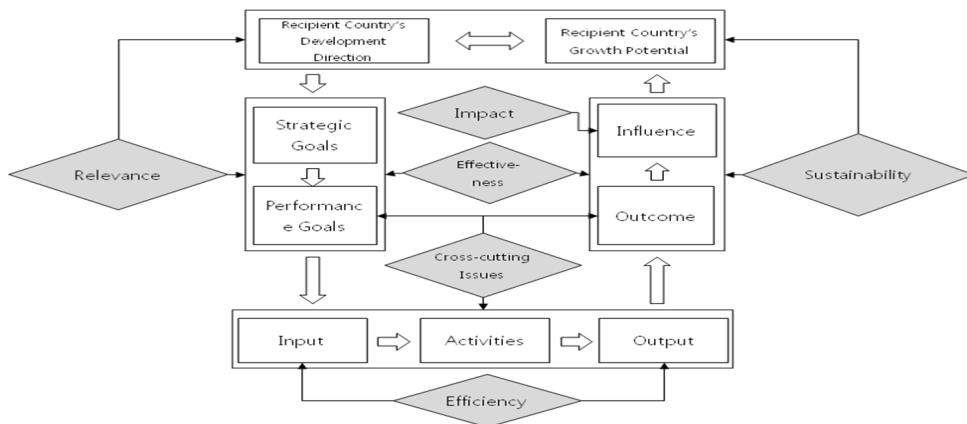
- The follow-up evaluation of the e-Government ODA project should be conducted based on a comprehensive reflection on the nature of the ODA project to enhance the mutual cooperation between the recipient and donor countries and
- the effectiveness of aid as well as the nature of the e-Government project to ensure that the e-Government of the recipient country can contribute to the reform of the public sector and improvement of public services.
 - The e-Government performance evaluation can be of various types such as IT infrastructure, G2G, G2B and G2C, etc. depending on the project content and the evaluation criteria and items must be set accordingly.
- The Project for the Construction of a Motor Vehicles Office in Erbil was conducted with an aim to create an IT infrastructure by building an advanced DTC; thus, the evaluation criteria and items must be established according to this nature.

b. Development of the Evaluation Model

1) Evaluation Model for the ODA Project

- The evaluation criteria for an ODA project include relevance, efficiency, effectiveness, impact, sustainability and cross-cutting issue as prescribed by the OECD/DAC Criteria and these can be represented in a diagram as follows:

<Fig. 2> ODA Project Evaluation Model - OECD/DAC Criteria



- The relevance of an ODA project is evaluated based on whether it conforms to the international Millennium Development Goals (MDGs) and to the policies of the donor and recipient countries. In other words, the performance goals set in the project planning stage must be consistent with the MDGs and the policy goals and directions of the involved countries.
- The efficiency of an ODA project is evaluated based on a comparison of the inputs and outputs of the project, and this can be regarded as an evaluation of the project processes; in this case, the inputs are the budget, time and manpower, while the outputs include the tangible and intangible

outcomes, working hours, competency of the beneficiaries, etc. Thus, in order to enhance efficiency, efforts must be made to minimize the inputs and maximize the outputs during project implementation.

- The effectiveness of an ODA project is evaluated based on the extent to which the project performance satisfies the project goals and can be regarded as an evaluation of the project outcomes. The project outcomes, i.e. project performance, are observed upon project completion, whereas the project goals are introduced in the planning stage. Thus, in order to determine the effectiveness of a project, the project goals must be clear and measurable, and it must be possible to prove the project performance in a fair and objective manner.
- The impact of an ODA project is evaluated based on the impact of the project itself or the project performance on its surroundings. In most cases, the resulting impact is consciously brought forth through the project performance goals and effects, but there are some cases in which unintended impact arises from the project itself or during its implementation. Of particular note, in this case, both the positive and negative impacts are evaluated.
- The sustainability of an ODA project is evaluated based on the continuity of the project performance, with the ultimate goal being the independence of the recipient group. Thus, sustainability should be determined with a focus on the possibility of the recipient group becoming independent and self-reliant.
- The cross-cutting issue is evaluated based on whether the realization of the basic values pursued by mankind such as mitigation of gender inequality, resolution of environmental issues, and consideration for the minority, etc.

is implied in the project content, and this must be evaluated independently from other evaluation criteria. In other words, the evaluation of cross-cutting issue must be evaluated based on objective data from an expert standpoint.

2) e-Government Performance Evaluation Model

- The follow-up evaluation of an e-Government ODA project is conducted centering on the final outcomes of the project and thus, the evaluation of the project outcome and impact and the evaluation of the e-Government performance may produce duplicate results. In other words, ODA project outcome and impact are basically equivalent to the e-Government performance.

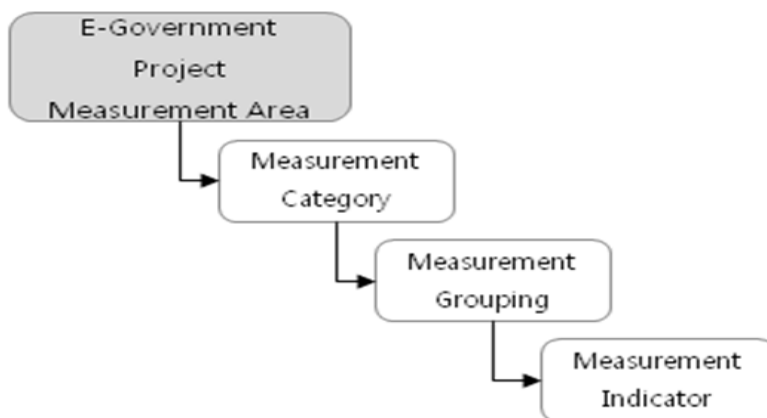
3) Overview of the e-Government Performance Evaluation

- With the advancement of ICT and widespread use of the Internet since 2000, various countries worldwide are committed to the establishment of an e-Government to provide administrative services anytime, anywhere without any time and location constraints.
- As a result, a small number of countries with an advanced IT infrastructure including Korea and the U.S. have successfully established an e-Government in nearly all sectors; however, in most other countries, there has only been a partial set-up of the e-Government such as digitalization of administrative services and the establishment of a computer system for some of the public services. Thus, it can be said that a standardized model for e-Government performance evaluation is yet to be set forth.
- However, of the reference models developed by the U.S., which is

equipped with the most advanced e-Government system in the world, the performance reference model (PRM) is typically employed in e-Government performance evaluation. PRM is a framework for assisting the assessment of IT development and enhancement projects conducted in the public sector; it enables governments and public institutions to measure the direct and indirect impact of IT investment on the performance of the institution concerned to facilitate the strategic management of and control over the work performed by the institution.

- PRM has a hierarchical structure comprised of 4 levels: Performance Goal, Measurement Areas, Measurement Categories, and Measurement Indicators.

<Fig. 3> Hierarchy of the PRM structure

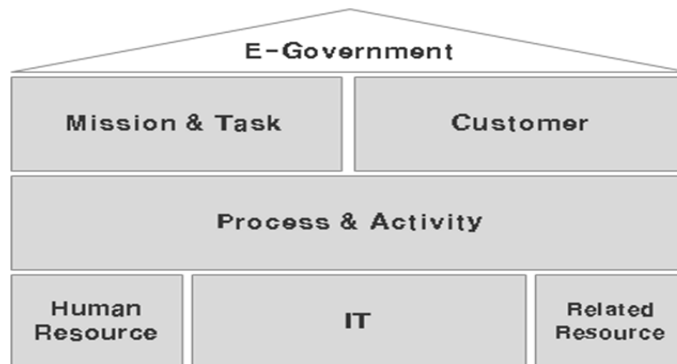


Source: Performance Reference Model 2.1, p.8. National Information Society Agency (2011), Ministry of Public Administration and Security

- These four levels can be further sub-divided into the following elements (refer to Fig. 4):
 - Performance Goal: e-Government
 - 6 Measurement Areas: Mission and Service Customer, Process and Activity, Human Resources, Information Technology, and Related Resources.
 - 16 Measurement Categories: Administrative Services, Customer Satisfaction,

Service Level, Scope of Service, Finance, Productivity, Service Quality, Security, User, Support Human Resources, System Quality, Standards, Information & Data, Utility, ICT Policy, and e-Government System

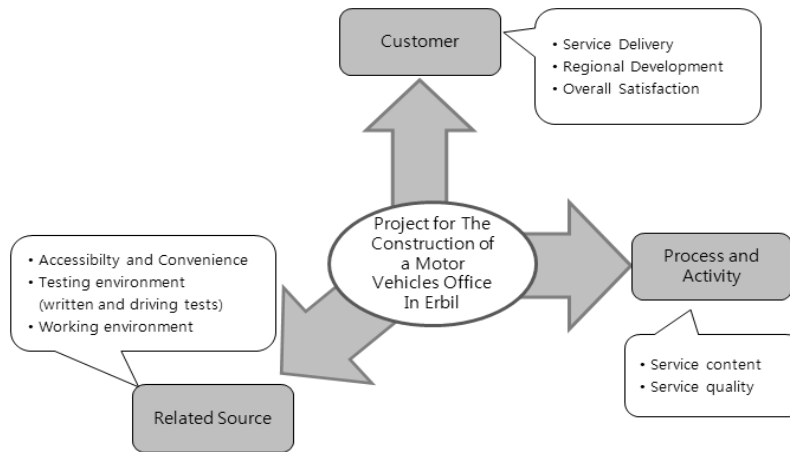
<Fig. 4> e-Government Performance Measurement Areas Based on PRM



Source: Performance Reference Model 2.1, p.4. National Information Society Agency (2011), Ministry of Public Administration and Security

- As for the evaluation based on the survey on the Project for the Construction of a Motor Vehicles Office in Erbil, the evaluation criteria were set centering on Customer, Processes and Activities, and Related Resources as the nature of this project is to provide universal services to the public.
 - The performance with respect to 'Customer' is evaluated based on the user satisfaction with respect to the use of DTC built through this project from the public's perspective, and it can be further divided into service delivery, regional development and overall satisfaction.
 - The performance with respect to 'Process and Activity' is evaluated based on the procedure and quality of processes and services related to the DTC, and it can be further divided into service content and quality, etc.
 - The performance with respect to 'Related Resources' is evaluated based on the influence related to DTC, and it can be further divided into accessibility, convenience, testing environment (written and driving skills tests) and working environment, etc.

<Fig. 5> Evaluation Criteria for the Survey on DTC in Erbil



2. Evaluation Items and Method

a. Evaluation Matrix

- The evaluation categories can be derived as follows according to the evaluation criteria of the evaluation model for the ODA project.
 - The evaluation categories for 'Relevance' include the demands and conditions of the recipient country, the strategies of the donor country, the relevance of the ODA project to the MDGs, and the implementation process of the ODA project.
 - The evaluation categories for 'Efficiency' include the employment of human resources in the ODA project, efficient execution of the budget, shorter project implementation period, and productivity of DTC.
 - The evaluation categories for 'Effectiveness' include the attainment of ODA project goals, activities performed to improve the effectiveness of ODA, and customer satisfaction.
 - The evaluation categories for 'Impact' include positive impact and negative impact.

- The evaluation categories for 'Sustainability' include the demands for DTC, organization capacity of DTC, support system of the Iraqi government, and technological level of the Iraqi society, etc.
- The evaluation categories for 'Cross-cutting Issue' include the issues related to the environment, gender equality, and human rights violation, etc.

<Table 3: Project Design Matrix(PDM)>

Evaluation Criteria	Evaluation Categories	Evaluation Questions	Evaluation Basis and Indicators	Investigative Method	Remark
Relevance	Demands and conditions of the recipient country in the ODA project	How satisfied are the beneficiaries?	User satisfaction	Questionnaire-based survey & Feedback	Quantitative / Qualitative
	Strategies of the donor country in the ODA project	Was the project consistent with the strategies to provide ODA to Iraq?	KOICA's project goals	Literature review	Qualitative
	Relevance of the ODA project to the MDGs	Was the project relevant to the MDGs?	Project goals & MDGs	Literature review	Qualitative
	ODA project implementation process	Was the local manpower for the implementation of this project properly organized?	Productivity per person	Number of applications and tests processed per employee	Quantitative
Efficiency	Budget efficiency of the ODA project	Was the project cost per beneficiary reasonable compared to other similar projects?	User population analysis	Number of average users per day, month and year	Qualitative
	Reduction in the ODA project implementation period	Was the project executed with efficiency?	Project schedule conformity	Conformity to the planned schedule	Quantitative / Qualitative
	System utility in the region	Has the system been utilized efficiently after project completion?	Degree of utilization of the system, materials and equipment	Literature review & Interview (Q&A)	Quantitative / Qualitative

Evaluation Criteria	Evaluation Categories	Evaluation Questions	Evaluation Basis and Indicators	Investigative Method	Remark
Effectiveness	Attainment of the ODA project goals	Was the building built to function as a DTC?	Relevant documents and building	Physical inspection	Qualitative
		Were the materials and equipment provided effectively for the operation of DTC?	Relevant documents and products	Physical inspection	Qualitative
		Were the project's performance goals attained?	Traffic accident incidence and technological level	Statistical analysis & Possibility of automatic test assessments	Quantitative / Qualitative
	Activities for improving the effectiveness of the ODA project	What kind of efforts were made to enhance the effectiveness of the project?	Relevant documents and interviews	Interview (Q&A)	Qualitative
Impact	Positive impact of the ODA project	Did the project have a positive impact on Iraq?	User satisfaction	Questionnaire-based survey	Quantitative / Qualitative
	Negative impact of the ODA project	Did the project have a negative impact on Iraq?	User satisfaction	Questionnaire-based survey	Quantitative / Qualitative
Sustainability	Subsequent demand for the ODA project	Is it possible to apply (sustain) this project to other regions?*	Interview results and comparison with similar projects	Interview (Q&A) & Domestic research analysis	Qualitative
	Support system of the Iraqi government	Did the Iraqi government establish a legal support system for DTC?*	Regulations (mandatory observation)	Literature review	Qualitative
	Technological level of the Iraqi society	Will the Iraqi government be able to maintain the technological level necessary to sustain this project?	Informatization level and operation status	Literature review	Qualitative
Cross-cutting Issue	Environment/gender equality/ICT	Did any cross-cutting issue (issues related to the environment, gender equality and ICT) result from this project?	Analysis related to the environmental impact, gender discrimination in driver's licensing qualification standards, and ICT	Questionnaire-based survey & Local system and regulations	Quantitative / Qualitative

* These are measurement areas for the e-Government PRM

b. Evaluation Method

1) Domestic Literature Review

The domestic literature review was conducted mainly by collecting data and information on ODA, the situation of Iraq and KRG, and vehicle registration and license plate manufacture, as well as examining the situation of domestic DTC operation.

2) Field Survey

As for the field survey, evaluators stayed in Erbil for a 5-day period from September 8 to 12 to collect the data and information necessary for the evaluation analysis through interviews with the relevant institutions, questionnaire-based surveys at DTC, and inspection of the operation processes implemented at the test site. Feedback was frequently obtained from DTC in Erbil and the evaluation team in Korea using the communication network.



3. Limitations and Constraints of Evaluation

The performance evaluation of the Project for the Construction of a Motor Vehicles Office in Erbil had the following limitations in terms of evaluation time period, duration, method, etc.:

a. Time-lag Between Project Completion and Evaluation

- It has been 6 years since the conclusion of the evaluation of the target project upon its completion in April 2007, and there have been various changes since.

- Although the physical requirements for the system were met upon project completion, normal operation was delayed for about 4 years due to personnel and institutional issues such as inadequate preparedness for operation by the local government. The system finally began its normal operation after KRG's designation of a maintenance and repair company and the ongoing follow-up management performed by KOICA. However, performance measures were unclear due to the time-lag between the project completion and the follow-up evaluation.

b. Difficulties in Collecting Domestic Data on the Target Project

- This project was jointly implemented by multiple companies specializing in construction, IT and driver's licensing system. At the time of the evaluation, the evaluation team had trouble collecting data and information on the target project as many of the project participants, except the representatives of Neo Information System (driver's licensing system partner), could not be reached due to reasons of resignation, etc.
 - Accordingly, the information on the domestic vehicle registration service and the operation of DTCs was collected from the Yongsan-gu Office and the Gangnam Driver's License Test Center in Seoul, respectively, as a means to supplement the data.

c. Lack of Local Statistical Data and Limitations of the Survey

- The statistical data officially obtained from KRG were substantially inadequate.
 - In particular, there were no comprehensive statistical data. For instance, the statistics related to traffic accidents dated back to 2008 and were the same data provided for the Preliminary Feasibility Study for the Master Plan for the Traffic System of KRG in Iraq. Also, only the 2008, 2010 and 2012

- statistics were available in relation to vehicle owners and licensed drivers.
- During an interview with the government officials, it was learned that "The data tracking and management system is still incomplete and the comprehensive statistics will likely be available in 10 years after proper management."
- As for the questionnaire-based survey, the initial goal was to obtain responses from a subject pool of at least 30 people, but only 20 people returned the questionnaires.
- However, as a means to prevent potential errors caused by bias, the final evaluation result was derived without any problem based on the complementary use of qualitative and quantitative approaches, taking into account the statements given during the interview with the local government officials regarding high user dissatisfaction with the driver's license test due to the increased difficulty following the introduction of the new licensing system, and the average score of 68.9 points given by the survey respondents in regard to their satisfaction with the difficulty level of the new driving skills test.

e. Other Limitations

- The evaluation was conducted over the course of five and a half months, which was quite short. Due to the deadline for the initial draft of the final report (Oct. 31) amongst other constraints, a field survey was conducted only once. Also, the survey period was scheduled in early September (from 8th to 12th) to avoid the local religious events (Ramadan, Eid, etc.), which resulted in a slightly tight schedule from the field survey period until the final report submission.
- However, efforts were made to overcome the limitations such as the time constraints and the evaluation was conducted after recruiting a traffic management expert to improve the integrity of the survey.



4. Domestic and Overseas Research and Survey Methods

a. Domestic Survey

- Literature review: KOICA's reports on similar projects and interim and final evaluation reports on the target project
- Visit to the vehicle registration office: information on the vehicle registration procedure and other relevant information
- Visit to the Gangnam Driver's License Test Center: inspection of the test procedures and test center situation, etc.

b. Field Survey

1) Field Survey Schedule

<Table 4: Field Survey Schedule>

Date	Visited institution	Main interviewee	Description
Sept. 8 (Sun.)	KOICA Erbil Office	Director	<ul style="list-style-type: none"> ◦ Consult on the evaluation plan ◦ Identify the current situation in Erbil
	Traffic Police in Erbil	Major General	<ul style="list-style-type: none"> ◦ Obtain feedback on the evaluation and request information on current status and statistical data
	DTC in Erbil	Major	<ul style="list-style-type: none"> ◦ Obtain feedback on the operation performance of DTC ◦ Request statistical data on operations
Sept. 9 (Mon.)	DTC in Erbil	Applicants	<ul style="list-style-type: none"> ◦ Observe the operation processes at the Office ◦ Conduct a survey with the test applicants as the subjects
		Office staff	<ul style="list-style-type: none"> ◦ Observe and inspect the operation processes ◦ Conduct a staff satisfaction survey and interview the staff

Sept. 10 (Tues.)	DTC in Erbil	Office staff	◦ Perform a field inspection of the written and driving skills test sites (utilization of the computer and other technical systems, etc.)
	KOICA Erbil Office	Director	◦ Obtain the requested data (statistics, written interview forms)
Sept. 11 (Wed.)	DTC in Erbil	Office staff	◦ Conduct a comprehensive evaluation of the project and propose the measures for development
	Traffic Police, Ministry of Interior, KRG	Major General of Traffic Police, Ministry of Interior	◦ Obtain feedback from the supervising institution of the recipient country
	KOICA Erbil Office	Director	◦ Collect data from the local office concerned in the target project
Sept. 12 (Thurs.)	DTC in Erbil	Field inspection	◦ Conduct supplementary surveys

2) Data Collection and Survey Methods

<Table 5: Data Collection and Survey Methods>

Category	Subject	Data Collection and Survey Method
Statistical data	Ministry of Interior, KRG	◦ Requested in advance and obtained in person
Interview	Major personnel at DTC, Major of Traffic Police, and Ministry of Interior, KRG	◦ Field interview
Staff interview	Managers at DTC	◦ Field interview (Individuals responsible for Operation Support and Test Management)
Questionnaire re-based survey	Applicants and DTC staff	◦ Questionnaire Design - The questionnaire was subdivided into factors (dimensions), with the questions chosen with reference to the Public-service Customer Satisfaction Index (PCSI), used for the management performance evaluation of domestic public institutions.

		<ul style="list-style-type: none"> - The results of the multiple-choice questions in the questionnaire were analyzed by gender, age, history of test application and educational background of the respondents and subjective opinions were additional obtained to be reflected in the policy proposal. o Survey Method <ul style="list-style-type: none"> - In order to ensure the integrity of the survey, random sampling and exit poll were conducted with the cooperation of KOICA. - As for the staff satisfaction survey, the questionnaires were distributed in advance and collected during the field survey. - As for the user satisfaction survey, the written test satisfaction survey was conducted in front of the written test site with the written test applicants as the subjects, while the driving skills test satisfaction survey was conducted with the applicants who completed the driving skills test. The overall (user) satisfaction rate was determined by distributing the questionnaires to the users of the services provided by the office.
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<Table 6: Details of the Survey >

Subjects	Survey Location	Number of Respondents	Description
Written test applicants	Written test site	17	Satisfaction with the written test
Driving skills test applicants	Driving skills test site	17	Satisfaction with the driving skills test
DTC Service Users	Service Office	18	User satisfaction with the services
DTC staff	Staff Office, etc.	20	Staff satisfaction



5. Division of Work and Schedule (Evaluation Team)

a. Division of Work

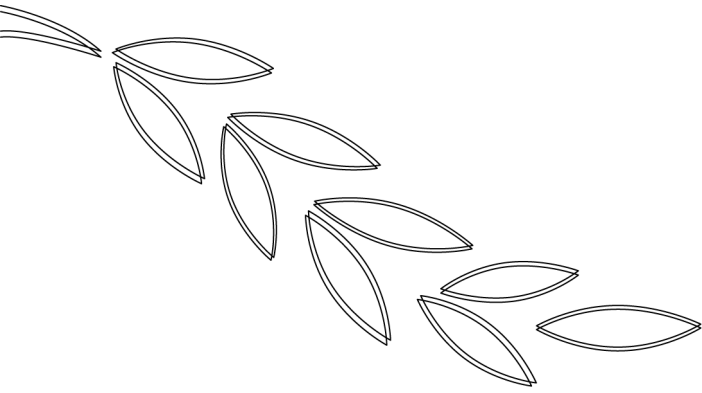
<Table 7: Division of Work within the Evaluation Team>

	Name (Expert Grading)	Work Assigned	Remark
Exclusive Responsi- bility	Cho Cheol-won (Class 1)	In charge of evaluation	TL
	Lee Won-yeong (Class 4)	Survey and analysis	Assistant investigator (Class 4)
	Kang Seon-Koo (Class 4)	Evaluation and analysis	Assistant investigator (Class 4)
Non- exclusive Responsi- bility	Park Seok-Hoon (Class 1)	In charge of evaluation support	* Accompany the investigators for the field survey
	Park Gyeong-sik (Class 3)	All matters related to civil affairs and project implementation	
	Shim Jae-seong (Class 1)	Review and analysis of the survey results related to the civil affairs services	
	Woo Sang-tae (Class 2)	All matters related to DTC and testing	
	Kim Jung-hyo (Class 1)	Review and analysis of the survey results related to DTC	
	Yu Ji-beom (Class 4)	Assessment analysis related to the budget execution	
	Yun Chan-gyun (Class 1)	Review and analysis of survey results related to data processing work	

b. Evaluation Schedule

<Table 8: Major Activities According to the Evaluation Schedule>

Category	Schedule	Major Activities
Survey preparation and evaluation design	July 12 ~ July 18	<ul style="list-style-type: none"> · Set forth the evaluation schedule and plan · Recruit local experts · Hold the evaluation commencement presentation (July 18)
Domestic survey	July 19 ~ Sept. 6	<ul style="list-style-type: none"> · Perform domestic literature review (KOICA Library) · Interview the Vehicle Registration Officers at Yongsan-gu Office · Prepare for the field survey
Field survey (Erbil)	Sept. 7 ~ Sept. 13	<ul style="list-style-type: none"> · Interview the relevant government officials of the recipient country · Investigate into the current situation of DTC in Erbil · Conduct a questionnaire-based survey with the test applicants and staff as the subjects
Organization of evaluation results	Sept. 13 ~ Oct. 10	<ul style="list-style-type: none"> · Organize the results of the domestic and field surveys · Derive evaluation results
Interim report	Oct. 11	<ul style="list-style-type: none"> · Give an interim report on the evaluation results
Supplementation to the evaluation results	Oct. 12 ~ Oct. 30	<ul style="list-style-type: none"> · Perform additional domestic and overseas surveys/research
Submission of the initial draft of the final report	Oct. 31	<ul style="list-style-type: none"> · Submit the initial draft of the final report on the evaluation results
Revisions to the final report	Nov. 1 ~ Dec. 26	<ul style="list-style-type: none"> · Revise and supplement the final report
Completion of evaluation	Dec. 27	<ul style="list-style-type: none"> · Submit the final report



III. Analysis of TOE (Literature Review)

1. Environmental Analysis by Country/Region/Field
2. Association Analysis of Interested Parties and TOE



Analysis of TOE (Literature Review)



1. Environmental Analysis by Country/Region/Field

a. Analysis of the Country (Iraq)

1) General Details

<Table 9: General Details on Iraq>

Country name	○ Republic of Iraq
Location	○ North-central region of the Middle East
Area	○ 441,839km ² (twice the size of the Korean peninsula)
Climate	○ Dry, desert climate; annual average rainfall of 170mm ○ Min. and max. temperatures on average (24 to 43°C in July and August and 4 to 16°C in January)
National capital	○ Baghdad
Population	○ 34 million (2013, EIU projection)
Major cities and their population	○ Baghdad (7.26 million), Nineveh (3.35 million), Basra (2.6 million), Babel (1.86 million), Dhi Qar (1.88 million), Anbar (1.6 million), Najaf (1.32 million), Diyala (1.48 million), etc.
Ethnic groups	○ Arabs: 82%, Kurds: 13%, Other: 5% (Persians, Turkmen, Assyrians, Armenians, etc.)
Languages	○ Arabic (official language), Kurdish (limited to Kurdistan region)
Religions	○ Islam: 97% (Shia: 60%, Arabic-Shia: 20%, Kurdish-Sunni: 15%, others 2%), Christianity and others: 3%
Date of Foundation (Independence)	○ October 3, 1932 (independence from the United Kingdom)
Form of Government	○ Federal parliamentary constitutional republic
Chief of State (Person of Authority)	○ Chief of State: President Jalal Talabani ○ Date of Inauguration: Nov. 2010 ○ Prime Minister: Nouri al-Maliki ○ Date of Inauguration: Dec. 2010 (until the nomination of the next Prime Minister)

Source: EIU, BMI

2) Economic Index

<Table 10: Economic Index of Iraq>

Nominal GDP	US\$ 229,726,000,000 (2013, EIU estimate)
Real economic growth rate	8.2% (2013, EIU estimate)
GDP per capita	US\$ 5,425 (2013, PPPCriteria, EIU estimate)
Unemployment rate	16.0% (2013, BMI estimate)
Inflation rate	6.0% (2013, EIU)
Currency unit	Iraq Dinar (ID)
Currency exchange	US\$1= ID 1,166(2013, EIU)
Foreign debt	US\$ 41.1 billion (2013, EIU estimate)
Foreign-exchange reserves	US\$ 65.2 billion(2013, EIU)
Industrial structure	Manufacture (58.8%), Service (26.7%), Agriculture (11.9%) (2007,EIU)
Trade scale	US\$93.5 billion (Export), US\$66.6 billion (Import), trade surplus: US\$26.8 billion (2013, EIU estimate)
Traded goods	<ul style="list-style-type: none"> ○ Export: crude oil, jujubes, sheepskin, wool, etc. ○ Import: food, medications and medical supplies, machinery, automobiles, home appliances, other consumables, etc.

Source: Ministry of Planning (Iraq), EIU, BMI

3) Korea-Iraq Relations

<Table 11: Korea-Iraq Relations>

	Date of signing	Description
Agreement	March 1983	Agreement on Trade, Economy, Technology and Science
	May 1985	Agreement on Air Transportation
	Sept. 1985	Agreement on Culture
	June 1987	Agreement on Land for the Official Residences of Foreign Diplomats
Inter-government consultative organization	Korea-Iraq Joint Committee / Korea-Iraq Resource Cooperation Committee / Korea-Iraq Economic Cooperation Forum	
Trade scale	<ul style="list-style-type: none"> ○ US\$ 12.08 billion (2012) - Export: 1.86 billion - Import: 10.2 billion 	<ul style="list-style-type: none"> ○ US\$ 3.1 billion (as of 2013.4) - Export: 0.63 billion - Import: 3.48 billion
Traded goods	<ul style="list-style-type: none"> ○ Export: automobiles, static electricity devices, textile and chemical machinery, motor and pump, steel tubes and lines, etc. ○ Import: crude oil 	

Investment exchange	<ul style="list-style-type: none"> ○ Korea National Oil Corporation signed an agreement with the KRG for the mining rights to 8 exploratory mining areas such as Bassian and Kusitafa (7.2 billion barrels in total, 3.1 billion barrels considering the shares) and is conducting subsequent development ○ Korea Gas Corporation (KOGAS) took part in the international tender for 11 oil fields initiated by the central government of Iraq in 2009 as a member of a consortium and has a share in the Zubair and Badraoil fields. ○ KOGAS signed an independent development service agreement for the Akkas oilfield in Anbar with the central government of Iraq in Oct. 2011.
Overseas Koreans/ resident employees/ workers	<ul style="list-style-type: none"> ○ There are 102 Koreans residing in Kurdistan as of mid-June 2013. ○ There are 787 Koreans residing in the area under the jurisdiction of the central government as of mid-June 2013. ○ There are some 300 Koreans working at the construction sites in the central and southern regions of Iraq incl. Karbala. ○ There are some 25 resident employees of KOTRA, KOICA, etc. and the Korean Embassy in Baghdad.

Source: Ministry of Planning (Iraq), Korea International Trade Association (KITA), Ministry of Foreign Affairs (Korea)

4) Main Economic Indicators

<Table 12: Main Economic Indicators of Iraq>

Category	Indicator (Unit)	2013			
Country (General)	Population (persons)	34 million (2013년, EIU projection)			
	Area (km ²)	441, 839km ²			
	Comparison to the Korean peninsula	2-times bigger			
	Indicator (Unit)	2010*	2011**	2012***	2013***
Domestic economy	GDP (current price, US\$ million)	146,973	157,114	179,424	199,160
	GDP (current price, ID billion)	171,957	183,822	209,925	233,016
	Real economic growth rate (%)	5.5**	8.2	7.6	8.2
	Population (million people)	31.5**	32.2	32.9	33.9
	GDP per capital (PPP-based, US\$)	4,991**	5,392	5,739	6,168

	Government revenue (% of GDP)	40.4	58	60.3	54	
	Government expenditure (% of GDP)	37.4	48.2	50.5	48	
	Fiscal balance (% of GDP)	3	9.8	9.8	6	
	Foreign exchange rate (year-end) ID : US\$	1,170	1,170*	1,168	1,168	
	Inflation rate (%)	2.4	5.6*	6.2	5.3	
	International Economy	Export (FOB-based, US\$ million)	51,764	82,769	93,752	97,201
		Import (FOB-based, US\$ million)	43,915	53,928	64,713	71,490
Trade balance (US\$ million)		7,849	28,842	29,039	25,711	
Current balance (US\$ million)		2,096	21,758	23,759	19,226	
Foreign debt (US\$ million)		52,582**	50,793	50,264	41,165	
Foreign-exchange reserves (US\$ million)		48,606	58,958*	61,835	64,932	
Crude oil output (1,000 barrels/day)		2,430	2,678*	3,107	3,402	

Source: EIU (* actual, ** estimate, *** forecast)

b. Regional Analysis (Erbil, KRG)

<Table 13: Regional Analysis of Erbil>

- Erbil is the capital of the Arbil Province situated 80km southeast of Mosul, with the majority of the population being Kurdish. It obtains rich water resources from the Tigris river, and is the largest wheat producer in the country.
- It is the fourth largest city in Iraq after Baghdad, Basra and Mosul, and is the capital of the Kurdistan Region of Iraq.



General Information	
Area	• 14,471 km ²
Population	• 3.1 million (Arbil Province) (Erbil: 860,000)
Topographic feature	• Alpine region at 414m above sea level
Major industry	• Agriculture, textile

Political admini-
straiton

- Prior to the Kurdish uprising at the end of the Gulf War in 1991, Erbil was under the control of Saddam Hussein and the Kurdistan Democratic Party (KDP) captured by the city in 1996 with the assistance of the Iraqi government
- The city was the scene of rapturous celebrations on April 10, 2003 after the fall of the Ba'ath regime.

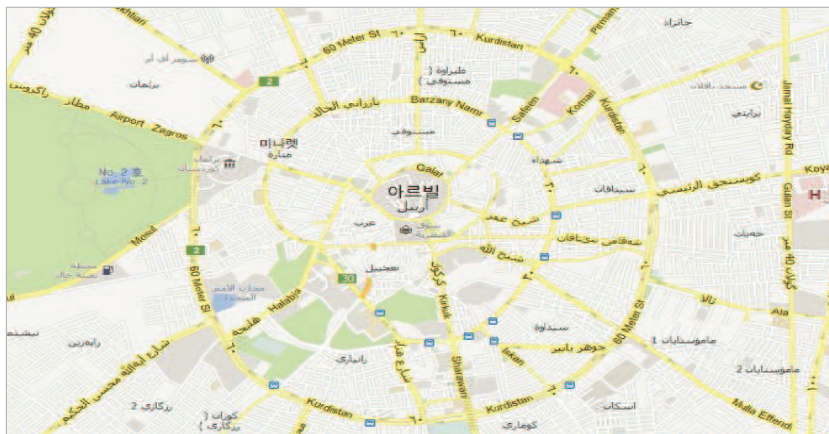


c. Environmental Analysis

1) General Information on Erbil

- Erbil, the capital of the Kurdistan Region of Iraq, has a radial city layout, typically observed in European cities. There are ring-shaped roads extending 30m, 60m, 100m and 150m from the city center. The traffic is concentrated at the city center, causing severe traffic congestion.

<Fig. 6: Map of Erbil>



Source: Google Maps

- Vehicles made by automobile manufacturers based in various countries can be observed on the road, which further shows that aid has been provided

- by a number of advanced countries. The number of Japanese (Toyota) and Korean (Hyundai and Kia) cars is especially high.
- Taxi is the main method of transportation in the city center. It is operated based on a bargaining method without the use of systematic meters, and some of the taxis are noticeably old.
 - The road pavement conditions are satisfactory, but there are many roads where the lanes are not very visible. Also, there are areas in which there are traffic signals but an absence of crosswalks, so pedestrians tend to cross the roads in areas near a speed bump.
 - Many people have a positive perception of the Zaytun Division, which has resulted in friendliness shown toward Koreans. Advertisements by Korean companies are also noticeable.

<Photograph 1: Traffic Conditions in Erbil>



2) Population

- The total population of the Kurdistan Region was 5.35 million as of 2010, and the annual population growth rate has been high. Under the assumption that the high population growth rate is maintained, the population in the region is expected to grow to approx. 6.31 million by 2016.
- According to CIA, the total population of Iraq was 31,129,225 as of 2012

with the total population of Kurdistan accounting for 17.6% of the total population at 5.5 million. The population growth rate of the Arbil Province is the highest at 3.2%.

- Birth rate (total number of births per 1,000 of a population each year) between 2004 and 2010 was very high at 29.9.

<Table 14: Population and Population Growth Rate of Kurdistan>

Year	Population and Population Growth Rate of Kurdistan					
	Population	Growth Rate	Annual average population growth rate (%)			
			Erbil	Sulaymaniyah	Duhok	Kurdistan Region
2003	3,910,329	—	3.2	3.1	2.6	3.0
2008	4,382,167	12%				
2010	5,351,276	22%				
2016	6,314,505	18%				

Source: KRG Statistics Organization, 『Results Report on the Preliminary Feasibility Study for the Master Plan for the Traffic System of KRG in Iraq』

3) Income

- The GDP per capital in the Kurdistan Region has been increasing annually at a significant rate in accordance with the high economic growth.

<Table 15: GDP per capita>

Year	Growth of GDP based on current value 2004~2008 (Iraqi dinar)	GDP per capita based on current value 2004~2008 (Iraqi dinar)
2004	2,419.6 billion	524,426
2005	4,198.3 billion	883,162
2006	8,817.5 billion	1,776,660
2007	10,227 billion	1,976,673
2008	20,954 billion	4,740,000
2011	28,320 billion	5,342,450

Source: International Monetary Fund(2003 to 2007) and Body Count - The Ministry of Planning/ KRG for the year 2008 only. AUM & KRSO. 2010 (2011 estimate)

4) Registered Vehicles

- The number of registered vehicles in the Kurdistan Region as of 2012 was 1,074,949, which is about 1 vehicle per 5.5 of the population, but this number has been increasing annually at a significant rate.
 - A sharp rise from 350,000 (2008) to over 1 million in just 4 years
- Private vehicles account for more than half of the registered vehicles at around 530,000, while trucks account for 25% at around 270,000.

<Table 16: Registered Vehicles in the Kurdistan Region>

Type of vehicle	2008	2010	2012
Private	168,420	340,449	534,868
Rental	76,475	76,475	76,974
Truck	91,501	192,325	269,359
Agricultural	5,981	12,719	20,975
Construction	1,978	6,521	12,640
Zanyary	5,900	14,256	140,548
Motorcycle	39,940	103,061	19,585
Total Number of Cars	349,491	747,816	1,074,949

Source: KRG, Ministry of Interior, Police Agency

- As of 2012, the number of registered vehicles in the Arbil Province accounted for more than half of the registered vehicles in the Region at around 530,000.

<Table 17: Registered Vehicles in the Kurdistan Region as of 2012 by Province and Vehicle Type>

Type of vehicle	Erbil	Sulaymaniyah	Duhok	Garmyan	Soran
Private	293,100	139,360	102,408	-	-
Rental	33,817	23,952	19,205	-	-
Truck	132,085	86,842	50,432	-	-
Agricultural	6,886	10,750	3,339	-	-
Construction	7,144	3,577	1,919	-	-
Zanyary	45,015	65,017	27,471	-	3,045
Motorcycle	9,420	9,968	197	-	-
Total Number of Cars	527,467	339,466	204,971	-	3,045

Source: KRG, Ministry of Interior, Police Agency

5) Driver's License Issuance

- The number of licensed drivers as of 2012 was 1,166,582, which is equivalent to about 1 licensed driver per 5 of the population. This number increased sharply until 2010 and has since remained steady.

<Table 18: Number of Licensed Drivers in the Kurdistan Region as of 2012>

Type of vehicle	2008	2010	2012
Private	237,986	500,386	600,335
Public	3,417	413,788	549,708
Agricultural & Construction	-	3,815	4,645
Handicapped	1,211	2,668	1,905
Motorcycle	156	1,825	9,989
Total	242,770	922,482	1,166,582

6) Traffic Accidents

- There has been an increase in road fatalities and casualties in Erbil since 2000.
- There was a temporary decline between 2004 and 2005, but the figures have increased again.

<Table 19: Road Fatalities and Casualties between 2000 and 2008>

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
Fatalities	68	53	127	81	6	17	61	165	150
Casualties	494	478	862	553	208	48	204	620	655



2. Association Analysis of Interested Parties and TOE

The interested parties include the project implementers in Korea and KRG, DTC operators and managers, local residents, as well as Korean institutions and small and medium enterprises associated with the traffic management system. The relevance between the interested parties and the target of evaluation is as follows:

a. Implementing Institutions

<Table 20: Interested Parties - Implementing Institutions>

	Description
Recipient country (Traffic Office, General Directorate of Traffic, Ministry of Interior)	<ul style="list-style-type: none">○ Project requesting party: Traffic Office, General Directorate of Traffic, Ministry of Interior○ Purpose<ul style="list-style-type: none">- To minimize casualties and fatalities by reducing traffic accidents and improve the traffic environment- To contribute to the increase in social overhead capital such as traffic management facilities, etc.
Donor country (KOICA)	<ul style="list-style-type: none">○ Project implementing party: Korea International Cooperation Agency (KOICA)○ Purpose<ul style="list-style-type: none">- To export the related supplies and services and create a foundation for the expansion of domestic companies into the Iraqi market- To instill a positive perception of Korea among local residents and perform post-war peace-keeping activities

b. DTC Operators and Managers

<Table 21: Interested Parties - DTC Operators and Managers>

	Description
Staff	<ul style="list-style-type: none"> ○ Institution: Driving License Department, Directory of Erbil Traffic Police ○ Main Interested Parties <ul style="list-style-type: none"> - Headed by Major Aram Burhan: Authority, Responsibility and Capacity as the Manager - Department staff: Operators and managers who maintain and manage the computer system and the familiarity of the operation processes
Maintenance and repair company	<ul style="list-style-type: none"> ○ Company: SAFETICO (Erbil Branch Director, Imad Al-Mufti) ○ Assigned Tasks <ul style="list-style-type: none"> - Maintain and manage the department facilities and computer system - Maintain cooperative ties with Korean technological companies, provide technical advisory and supply materials

c. Beneficiaries (Iraq): Driver's License Test Applicants and Local Residents

<Table 22: Interested Parties - Beneficiaries (Iraq)>

	Description
Driver's License Test Applicants	<ul style="list-style-type: none"> ○ Background: Drivers had been driving without a license and there was absence of a traffic management system in Erbil ○ Benefits for applicants: With the introduction of electronic scoring system and the driver's license test and issuance system, the traffic management system is expected to become more systematic and advanced resulting in safer and proper traffic.
Local residents	<ul style="list-style-type: none"> ○ Background: There were various risks to one's safety due to crimes related to unlicensed vehicles and absence of a traffic management system ○ Benefits for local residents: The risks for traffic accidents and related crimes are expected to decrease with the modernization of the traffic management system and the driver and vehicle registration for management purposes

d. Beneficiaries (Korea): Institutions and Companies Associated with the Traffic Management System

<Table 23: Interested Parties - Institutions and Companies Associated with the Traffic Management System>

	Description
Relevant institutions	<ul style="list-style-type: none"> ○ Relevant institutions of the traffic management system and social overhead capital - In case of implementation of similar projects, the relevant institutions can contribute to Korea providing ODA with their know-how and technological prowess, acquire foreign currency and help promote the national image of Korea
Domestic companies	<ul style="list-style-type: none"> ○ Domestic companies associated with driver's licensing and traffic management system - In case of future ODA projects, excellent domestic companies can expand into the overseas market (Domestic companies specializing in the traffic management system such as road construction, driver's licensing system, traffic signal system, etc.)



IV. Evaluation Results

1. Relevance
2. Efficiency
3. Effectiveness
4. Impact
5. Sustainability
6. Cross-cutting issue

IV Evaluation Results



1. Relevance

a. Evaluation Criteria and Basis for Results

1) Criteria

- Satisfaction among the beneficiaries in the recipient country
- Consistency with the major ODA strategies regarding Iraq
- Relevance to the MDGs?
- Appropriateness of technology used to resolve the development issues

2) Basis for Results: Interview and Operation Process Inspection Results

b. Matters for Evaluation

1) Factors Related to the Government of and Beneficiaries in the Recipient Country

- At the time of the request for the ODA project, Erbil and KRG were facing problems of traffic congestion resulting from a sharp increase in the demand for driver's license acquisition, crimes associated with unlicensed vehicles, and frequent unlawful issuance of driver's licenses. In order to resolve these issues efficiently, they requested the ODA project in question to introduce a modernized traffic management system.
- The introduction of the new electronic scoring system has enhanced the

fairness of the driver's license issuance and raised the level of difficulty in acquiring the driver's license. Thus, it can be said that the project outcomes were consistent with the goals and strategies of the government of the recipient country in line with their needs.

- The user satisfaction survey resulted in an overall score of 80.1 points, which shows that users are highly satisfied with the new system; based on this, it can be said that the project had relevance with respect to the beneficiaries.
- Also, because the taxi is the only practical method of transportation used by the masses in the city center of Erbil, most residents without a private vehicle have trouble getting around. Thus, the introduction and management of a new system for driver's license test and issuance is consistent with the need arising from the cultural background and means of living of the beneficiaries.

2) Consistency with the Major ODA Strategies Regarding Iraq

- The introduction of new technologies such as the written test scoring system based on the OMR card and the driving skills test scoring system based on electronic sensors has led to the applicants becoming aware that the tests have become fair.
- As for the goal to minimize road casualties and fatalities, there is a need to review the statistics at a later time since the related statistical data have been available since 2009. However, based on the interviews with the government officials, the project is deemed to have contributed to the attainment of this goal.
- The project also contributed to the increase in SOC such as the traffic management facilities, etc. as construction of additional DTC offices is being considered.

3) Relevance to the MDGs

- The relevance of this project to the MDGs has to do with the third MDG, which is to promote gender equality and empower women.
 - The results of the user satisfaction survey showed that the satisfaction rate was higher among women at 83.4 points compared to men at 78.5 points. With respect to the restrictions that prevented applicants from taking the driver's license test, there were only age restrictions (18 years of age and above) and no gender restrictions.
 - Considering that women's social roles and activities are minimal due to the nature of the Muslim culture, extended application of this system to all areas of the Kurdistan Region is expected to contribute to the eradication of gender-based discrimination and the promotion of women's rights in the long term.

4) Relevance to the Local Operating Personnel

- The operating personnel of DTC in Erbil was comprised of 120 employees in total and this figure includes the system management and other maintenance and repair personnel, as shown in the government official interview report.
 - It has been 20 months since the commencement of normal operation, and a matter of building additional DTC offices is currently under review due to the accumulating number of driver's license test applicants.
 - In case of additional establishments of DTC offices, there will be a need to calculate the appropriate personnel capacity, taking into account the local characteristics. However, at this point, it is deemed that it would be appropriate to divide the organization into a 'test management division,' 'operation support division,' and 'civil affairs division,' and assign the personnel accordingly.

c. Evaluation Results

- Based on the aforementioned information, the project in question was deemed to have been "Very relevant."

2. Efficiency

a. Evaluation Criteria and Basis for Results

1) Criteria

- Reasonability of the project cost
- Efficiency of project execution
- Current system utility

2) Basis for Results: Post-completion Evaluation Report, Operation Process Inspection and Interview Results

b. Matters for Evaluation

1) Reasonability of Project Cost

- The project was completed without exceeding the budget limit.

<Table 24: Project Cost Distribution (Budget Allocation)>

(Unit: million KRW, %)

	Total	Design & Construction	CM/Audit	Materials & Equipment	Dispatch of Experts	Trainee Invitation	PMC	Reserve fund
Project cost	5,025	1,859	128	2,659	141	121	55	62
Ratio	100	37.0	2.5	52.9	2.8	2.4	1.1	1.3

Source: Post-completion Evaluation Report on the Project for the Construction of a Motor Vehicles Office in Erbil

2) Efficiency of Project Execution

- According to the post-completion evaluation report by KOICA on the project in question, the project was completed within the scheduled deadline in April 2007.
 - However, it took 4 years before the normal operation of the system began due to reasons of failure to select a maintenance and repair company, etc., and this was undesirable from the aspect of efficiency.

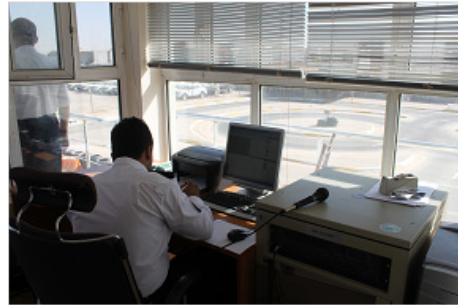
3) System Utility

- Based on the interview with the Major of DTC, the number of daily users has increased more than 2-fold from 300 (early days of system operation) to 700.
- The project was initially divided into three areas: Driver's license test site, vehicle registration and inspection site, and license plate manufacturing site. However, due to the internal circumstances of KRG, only the driver's license test site is under normal operation, while the equipment for vehicle registration and license plate manufacture is not being utilized.
 - The equipment for vehicle registration and license plate manufacture is not being utilized as KRG and the Iraqi government are currently contemplating on the measures to link the vehicle registration and license plate number system.
- The managers at DTC were skillfully adept at using the electronic scoring system for the driving skills test and performed their work using the computers; on the other hand, the written tests were done by hand.
 - An OMR card-based electronic scoring system was established for the written test initially; however, they switched to the manual scoring system because of complaints made by the test takers.

<Photo: License plate manufacturing equipment>



<Photo: Electronic scoring system>



c. Evaluation Results

- The project is deemed to have been efficient in terms of cost and execution based on the efficient budget execution and the completion of the project within the scheduled deadline.
- The increase in users compared to the initial operation is very encouraging. Also, the economic value of the new testing system is immeasurable as it prevent unlawful acts and corruption in a time of reinforcing the legal and institutional foundations of the developing country and contributed to the improved quality of life through the reduction of road casualties and fatalities, etc.
- However, the disappointing factors include the four-year delay in normal operation after project completion and the non-utilization of the vehicle registration and license plate manufacturing systems and the electronic written test system. Nevertheless, it is deemed possible for KRG to mitigate these factors through policy resolutions with the Iraqi government.
- Based on the aforementioned information, this project is deemed to have been "Partially Efficient."



3. Effectiveness

a. Evaluation Criteria and Basis for Results

1) Criteria

- Appropriateness of the building and site for its purpose
- Effective supply of materials and equipment for the operation of the driver's license test site
- Attainment of the project's performance goals
- Efforts made to enhance the effectiveness of the project

2) Basis for Results: Interview, KOICA's documents, statistics and operation process inspection results

b. Matters for Evaluation

1) Appropriateness of the Building and Site for Its Purpose

- DTC is comprised of a management building and a driving skills test site, with the latter being further divided into two sites.
- The driving skills test site was in an appropriate size and had an appropriate scoring system. The civil affairs office situated inside the building also had appropriate facilities for its purpose such as the issuance of waiting number, etc.

<Photo: driving skills test Site>



<Photo: Civil Affairs Office>



2) Effective Supply of Materials and Equipment

- The office PCs were the ones provided at the time of project implementation, and network failure or operational problems resulting from the hardware was not observed.
- The computer programs were being used appropriately for registering driver's license test applications and managing the history of test-taking, and they were available in the local language and English.
- Driver's licenses were printed and laminated for issuance.

<Photo: Screenshot of the program>



<Photo: Printer for printing driver's licenses>



3) Attainment of the Project's Performance Goals

- The performance goals of the project are outline in Table 25. Because the Ministry of Interior and the Traffic Police currently lack the statistical data necessary to determine whether these goals have been attained, there is a need to perform follow-up observation and management at a later time.

<Table 25: Performance Goals and Evaluation Results>

Narrative Summary	Objective Indicators	Evaluation Results
<p><Long-term Goals></p> <ol style="list-style-type: none"> 1. Reduce traffic accidents by establishing an advanced traffic management system 2. Increase international trust by applying the international driver's licensing laws and regulations 3. Contribute to safety and security by inhibiting the use of unregistered vehicles in the acts of terrorism and criminal activities 	<ol style="list-style-type: none"> 1. 10% decrease in traffic accidents by 2009 2. 5% increase in international driver's license issuance by 2009 3. 5% decrease in unregistered vehicle incidence by 2009 	<ol style="list-style-type: none"> 1. Need for follow-up observation and management 2. The issued driver's licenses are not recognized for International Driving Permit (IDP) 3. Non-operation of the vehicle registration system
<p><Project Goals></p> <p>Establish and operate an advanced traffic management system</p>	<ol style="list-style-type: none"> 1. 15% increase in licensed drivers and registered vehicles by 2008 2. Reduction in traffic accidents 3. Improved customer satisfaction with DTC services 	<ol style="list-style-type: none"> 1. Need for follow-up observation and management 2. Need for follow-up observation and management 3. Survey not conducted initially; Need for follow-up observation and management
<p><Performance Outcome></p> <ol style="list-style-type: none"> 1. Construction of facilities related to driver's license and vehicle registration 2. Laws and regulations related to the driver's license and vehicles 3. Provision of a licensing system and equipment 4. Training of mid- and high-ranking managers 5. Improved technology used for vehicle inspection 6. Improved technology for managing the driver's licensing system 	<ol style="list-style-type: none"> 1. Completion of the construction and equipment set-up by April 2007 2. Independent management and monitoring by mid- and high-ranking managers in charge of system operation 3. Reduction in vehicle inspection time and enhanced precision of inspection 4. Reduction of complaints through automatic grading of the tests 	<ol style="list-style-type: none"> 1. Deadline met 2. Management and monitoring performed by the managers 3. Non-operation of the vehicle inspection system 4. Automatic assessment; test results typically accepted by applicants

- However, some of the statistical data and the content of the interview with the officials of the Ministry of Interior of KRG were reflected in the evaluation and DTC operation processes were inspected for qualitative data to overcome the aforementioned limitation.
- KRG expected that DTC operation and the fairness of the tests will contribute to the decline in traffic accidents in the future.

4) Efforts to Enhance the Positive Effects of the ODA Project

- KRG independently selected a maintenance and repair company (Safetico) to maintain the normal operation of DTC.
- KOICA also made an effort to enhance the positive effects of the project such as responding to the demands of KRG even after project completion.

c. Evaluation Results

- DTC in Erbil building had the appropriate layout and size as a site for providing the driver's license tests and necessary services.
- The materials and equipment necessary for DTC operation were supplied appropriately and there were no problems in the driver's license testing and issuance processes.
- KRG made an effort to maintain the normal operation of DTC by designating a maintenance and repair company, and KOICA also made an effort to enhance the positive effects of the project such as responding to the demands of KRG even after project completion.
- Based on the aforementioned information, it is deemed that the project was "Very Effective" in attaining the performance goals.



4. Impact

a. Evaluation Criteria and Basis for Results

1) Criteria

- The positive and negative impact of the project on the local community (based on the results of the satisfaction surveys)

2) Basis for Results: User and Staff Satisfaction Surveys and Interviews with the Government Officials

b. Matters for Evaluation

1) Fairness and Difficulty Level of the Tests

- The Major General of the Traffic Police of the Ministry of Interior, KGB, stated, "Majority of the citizens have complained that the tests have become too difficult after the introduction of the new testing system; however, the government is satisfied with this outcome."
 - This statement is consistent with the survey results, where the average score for user satisfaction with the difficulty level of the driving skills test was 69.1 points. This also signifies that managing a fair testing system can contribute to the reduction in unlawful acts and corruption.
 - The reason for the complaints regarding the difficulty level is that many of the applicants take the driving skills test without sufficient practice; it is not deemed to reflect the actual difficulty level.

2) Contribution to Local Development

- As for the contribution to local development, the staff satisfaction survey

results showed that an average score of 91.4 points was given with respect to the contribution made by DTC in Erbil to the local community.

3) Limitation

- There were concerns of reduced accuracy of the impact analysis resulting from a time-lag as it had been more than 6 years since the completion of the project (2007).
 - However, considering that the normal operation of the newly introduced system began in 2012 as a result of an independent effort made by KRG and not due to additional or changes in the physical factors, it is deemed that there weren't any factors that could have potentially distorted or negated the validity of the impact analysis results.

c. Evaluation Results

- Notwithstanding the time-lag of 6 years from the project completion, the results of the evaluation showed that there was sufficient impact on the local community resulting from the introduction of the new system and institutional changes.
 - The impact analysis results are supported by the opinions provided by KRG experts (Ministry of Interior, Traffic Police and DTC), and the staff satisfaction survey results. The low user satisfaction rate with respect to the difficulty level of the driving skills test is deemed to be evidence of the fact that the tests were conducted fairly and subsequently contributed to the development of the traffic management system.
- Based on the aforementioned information, the project is deemed to have had a "Very Positive Impact" on Erbil and the Kurdistan Region.



5. Sustainability

a. Evaluation Criteria and Basis for Results

1) Criteria

- Possibility of extended application (Sustainability) of the project to the other regions
- Preparation of a legal support system by the government
- The government's Technical Competency to sustain the project

2) Basis for Results: Interview Results and Staff Satisfaction Survey Results

b. Matters for Evaluation

1) Possibility of Extended Application to Other Regions

- The road conditions in the city center of Erbil is quite satisfactory; however, the taxi is the only practical method of transportation used by the masses in the city center and the increase in private vehicles has led to severe traffic congestions.
- KRG requested this project as a means to reduce the traffic congestion, and this particular goal was attained by increasing the difficulty level of the driving skills test and managing the testing processes in a fair manner.
 - Thus, it is expected that if KRG were to establish additional driving skills test centers in other regions based on mid- and long-term plans, it will help mitigate the sharp increase in demand for driver's license acquisition.
 - Based on the staff satisfaction survey results, which showed high scores for the 'need for additional establishments or extension of driving skills test

centers (97.9 points)' and the 'degree of contribution of DTC to local development (91.4 points),' it is deemed that there is sufficient possibility of an extended application of this project.

2) Legal Support by the Government

- One of the background reasons for the project implementation was that KRG desired to reduce the crimes committed using unregistered vehicles.
 - At present, anyone over the age of 18 can apply for the driver's license test, while efforts are being made to crack down on unlicensed drivers, who are imposed strict penalties such as a fine or 6 months of imprisonment.
 - Thus, this system is deemed to have been sufficiently sustainable due to the appropriate legal and institutional support provided by the government.

3) KRG's Technical Competency to Sustain the Project

- KOICA conducted 18 ODA projects in Iraq, centering on the major cities such as Baghdad, Erbil and Sulaymaniyah, until 2007, the year in which the project ended. It can be said that the post-war restoration and the building of a foundation for socioeconomic development were successfully implemented through these projects.
 - KOICA conducted 18 ODA projects in Iraq, 10 of which were conducted in Erbil, Sulaymaniya and Dohuk, the cities located in the Kurdistan Region. This became a constraining factor in the operation and management of the project initially.
 - Despite this, however, KRG made an effort to initiate the normal operation of DTC by selecting a maintenance and repair company, and as a result, normal operation finally began in January 2012. As such, KRG demonstrate its potential to become self-reliant and independent with a sense of ownership by actively seeking measures to operate the newly introduced system.

c. Evaluation Results

- KRG is making an active effort to expand and sustain the project. For instance, it is currently reviewing the budget allocation for the purpose of introducing an improved version of the traffic management system to other regions with DTC in Erbil as its model.
- The necessary conditions for sustaining the project are met, with the legal provisions prescribing severe penalties for unlicensed drivers.
- The head of DTC and its staff as well as the major government officials of KRG are working to resolve the arising problems with a sense of ownership such as dedicating their efforts to initiate the normal operation of the system by selecting a local maintenance and repair company and ensuring proper management.
- Based on the aforementioned information, it is deemed that this project is "Sufficiently Sustainable."



6. Cross-cutting issue

a. Gender-Sensitive Impact Assessment

- As it was noted in the section regarding the project's relevance to the MDGs, this project is expected to contribute to the promotion of gender equality and women's rights in the future.
 - The results of the user satisfaction survey showed that the satisfaction rate was higher among women at 83.4 points compared to men at 78.5 points. With respect to the restrictions that prevented applicants from taking the driver's license test, there were only age restrictions (18 years of age and above) and no gender restrictions.

- Considering that women's social roles and activities are minimal due to the nature of the Muslim culture, extended application of this system to all areas of the Kurdistan Region is expected to contribute to the eradication of gender-based discrimination and the promotion of women's rights in the long term.

b. Political and Social Impact Assessment

- The interview with the Major General of Traffic Police of the Ministry of Interior of KRG showed that the impact of the project did not simply stop at the construction of DTC.
 - In the past, it was possible to obtain a driver's license through illegal means such as using one's social network; however, with the introduction of the electronic scoring system, the driver's license test procedures have become fair for all.
 - The introduction of the new system has led to the prevention of unlawful acts and corruption in other areas of KRG and improved public conscientiousness. Based on this, it is expected to contribute to the political and social development of the developing country in question.

c. Economic Impact Assessment

- If KRG establishes additional driving skills test centers in other regions and collaborate with the Iraqi government on this effort, it will likely lead to the operation of a modernized traffic management system throughout the country.
 - The system is also expected to facilitate the management of individuals licensed to operate large and/or special vehicles, which will in turn enhance the management efficiency for the government.
 - At present, taxi is the most common means of transportation used by the masses. An introduction of a public bus system and management of licensed

bus drivers using this system will greatly contribute to the reduction in traffic congestion and stimulation of the economy through the jobs created in the newly established industry.

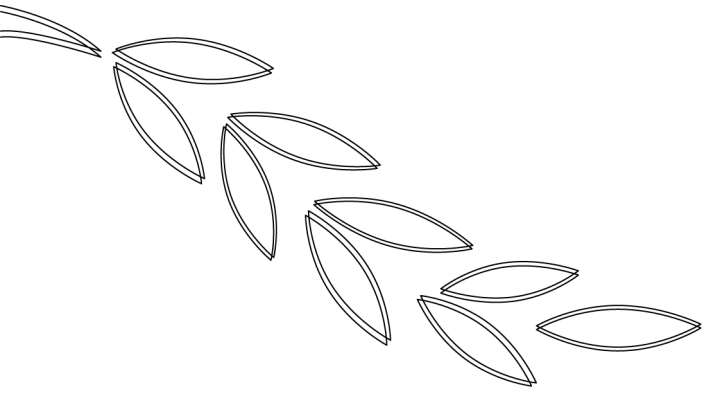
- Also, operation and management of fair driver's license test procedures will result in a great number of qualified drivers and reduce traffic accidents. Thus, this system is also expected to contribute to the reduction in the socioeconomic costs arising from property damage and personal injuries caused by traffic accidents.

d. Environmental Impact Assessment

- The most common means of transportation used by the public in the city center of Erbil is taxi, which is the culprit, along with the increase in private vehicles, behind traffic congestions.
 - However, this isn't an issue resulting from the DTC operation; rather, it is an issue arising from the increase in income, population, licensed drivers and vehicles.
 - Producing qualified, licensed drivers through a fair licensing procedure is expected to contribute to a reduction in environmental pollution.

e. ICT Impact Assessment

- The computer-based information management system for driver's license tests has contributed to the advancement of the e-Government through the computer-based management of statistical data regarding test application, passing and accident rates, operation performance analysis and personal information management.
 - In other words, it is expected to contribute to the socioeconomic development by creating jobs in the ICT and related fields and create economic values through the development of relevant industries.



V . Conclusions and Proposals

1. Major Evaluation Results and Lessons
2. Project-related Proposal
3. Policy Proposal

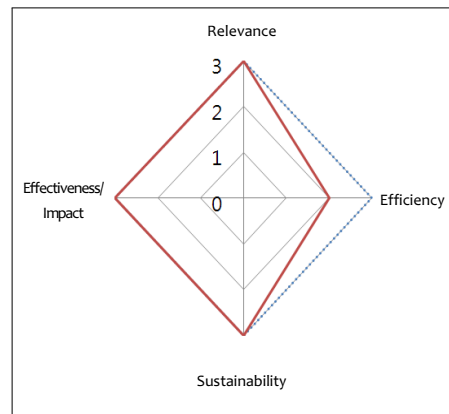


1. Major Evaluation Results and Lessons

- Based on the aforementioned information, the Project for the Construction of a Motor Vehicles Office in Erbil is considered to have been a very successful project.

- It resulted in visible and encouraging outcomes such as budget execution within the limit, increased number of test applicants and the government's independent efforts.

- It is disappointing that the vehicle registration office and the license plate manufacturing site are currently idle; however, since this resulted from the changes in the circumstances of the government of the recipient country, it is deemed that this will not be a problem if the necessary supplementary measures are implemented in case of executing a similar project at a later time.



[Evaluation Score for Each Criterion]



2. Project-related Proposal

- There is a need for the government of the recipient country to seek and implement the specific follow-up management measures after designating a local company to be in charge of performing the maintenance and repair work on the DTC facilities and system.
 - Due to the special nature of ODA projects and the nature of the recipient countries to rely on the donor countries and institutions, there is a need to set clear limitations with respect to follow-up management such as designating a time limit for the maintenance and repair period and education for the government, engineers, operation personnel, etc.

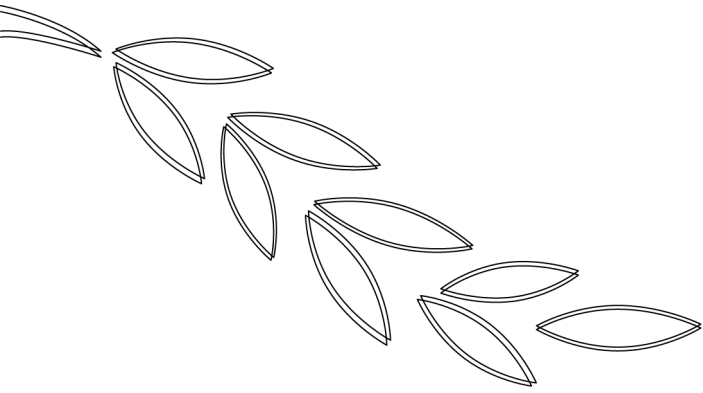


3. Policy Proposal

- There is a need to perform a thorough review and analysis of the laws and institutions of the recipient country in advance:
 - For instance, during project implementation, a separate driving skills test site was built for bus and large trailer truck drivers; however, in the Kurdistan Region, a Regular Class A driver's license is sufficient for a driver to operate any type of vehicle including buses, large trucks and trailer truckers. As such, lack of information can lead to non-use of facilities, which in turn results in operation inefficiency.
 - Also, the OMR card-based scoring system for the written test is also currently idle as a switch has been made to a manual scoring system in reflection of the complaints received from the test takers. In order to prevent such inefficiencies, there is a need to perform elaborate reviews and make thorough preparations in advance for similar projects in the

future in order to implement measures that are more suitable to the current political, cultural and economic situation of the recipient country.

- There is a need to seek measures to improve the driver's license class system of KRG and review the imposition of appropriate fees:
 - There are only tests for Regular Class A and B and motor vehicle driver's licenses available. There is a need to seek measures to further break down the license classes into large, trailer truck, etc.
 - At present, there are no fees required to take the driver's license tests, which has led people to apply for the tests without sufficient practice and in turn resulted in a massive waiting list. Thus, there is a need to determine the appropriate fees that should be imposed based on a thorough analysis of the overall circumstances including the average income.
- There is a need to review the possibility of establishing additional driving test centers:
 - Subjective opinions were obtained from the service users in addition to the user satisfaction survey, and there were complaints of long waiting time. In order to resolve this issue, there is a need to establish a mid- to long-term plan on how to disperse the demand for the driver's license tests.
 - KRG mentioned its plans to establish additional driving skills test centers in Erbil and nearby regions using its own budget; there is a need to conduct a thorough review of this issue.
- There is a need to seek measures to improve the environment:
 - There is a need to seek measures to establish effective public transportation system in Erbil and other major cities in the Kurbistan Region by setting forth a master plan for traffic and transportation.
 - There is a need to seek measures to reduce the operation of private vehicles, thereby mitigating traffic congestion and leading to a more widespread use of eco-friendly public transportation, with the ultimate aim to reduce environmental pollution and promote sustainable development.

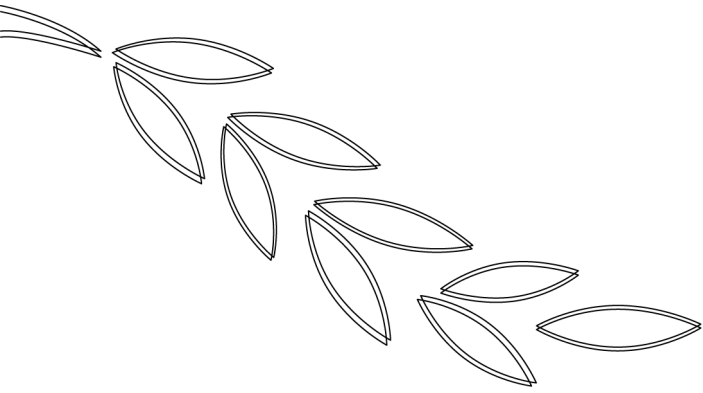


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Annexes



Annexes



1. Evaluation Score Calculation Standards

Evaluation Criteria		Score & Definition		
		3	2	1
Relevance	<ul style="list-style-type: none"> Consistency with the development background, goals and strategies of the recipient country Consistency with the policy to reinforce the sense of ownership of the recipient country Consistency with the means of living and cultural background of the beneficiaries Appropriateness of the technology used to resolve the development issues 	Very relevant	Partially relevant	Irrelevant
Effectiveness / Impact	<ul style="list-style-type: none"> Extent to which the intended output, purpose and goals were attained Extent to which the situation was changed as a result of the project, not an external factor Positive or negative impact on the people, institutions, environment, etc. Opinions of the beneficiaries and the interested parties on the impact of the project Extent of the confirmed changes resulting from the project 	Over 80% of the planned effects (Only positive indirect impact)	50~80% of the planned effects (Partially negative)	Under 80% of the planned effects (Occurrence of problem / Negative)
Efficiency	<ul style="list-style-type: none"> Efficient operation of the target of evaluation Achievement of more outcomes using the same resources Possibility of other alternatives that would've been lower in cost The economic value of the project in comparison to the other alternatives 	Efficient (Operation with 100%)	Partially efficient (Operation at 100% ~150%)	Inefficient (Operation at over 150%)

Evaluation Criteria		Score & Definition		
		3	2	1
Sustainability	<ul style="list-style-type: none"> Consistency with the priorities and effective demands of the recipient country Degree of sense of ownership of the people in the project implementation area Presence of institutions/systems and organizations for effective operation Financial means to maintain the project outcomes after project completion 	Very sustainable	Sustainable after mitigating the problems	Not sustainable



2. Evaluation Score Table

Grade	Relevance	Effectiveness/ Impact	Efficiency	Sustainability	Total Score
Very successful	3	3	3	3	12
	3	3	2	3	11
	3	2	3	3	11
	2	3	3	3	11
Successful	3	3	2	2	10
	3	2	3	2	10
	2	3	3	2	10
	3	2	3	1	9
	3	2	1	3	9
	2	3	3	1	9
	2	3	1	3	9
	2	2	3	2	9

	Relevance	Effectiveness/ Impact	Efficiency	Sustainability	Total Score
Partially successful	3	2	2	1	8
	3	2	1	2	8
	3	2	1	2	8
	3	3	1	1	8
	2	2	3	1	8
	2	2	2	2	8
	2	3	2	1	8
	2	3	1	2	8
	3	2	1	1	7
	3	2	1	1	7
	2	2	2	1	7
	2	3	1	1	7
	Relevance	Effectiveness/ Impact	Efficiency	Sustainability	Total Score
Inadequate	2	2	1	-	5
	3	1	-	-	4
	2	1	-	-	3



3. Field Survey Schedule

Schedule		Visited institution	Description
Sept. 8 (Sun.) 1st day	08:00 ~09:00	KOICA Erbil Office	- Consult on the evaluation survey schedule with the Director of KOICA Erbil Office (Cho Hyeong-ho) - Identify the current situation in Erbil
	11:00 ~12:00	KRG Traffic Police	- Interview the Major General of Traffic Police (Obtain feedback on the evaluation and request information on current status and statistical data)
	13:00 ~14:00	DTC	- Interview the Head of DTC (Explain the purpose of visit and evaluation and request statistical data on operations)
	14:00 ~17:00		- Identify the overall matters incl. DTC layout - Conduct a survey with the test applicants and the DTC staff as the subjects
Sept. 9 (Mon.) 2nd day	08:00 ~12:00	DTC	- Observe and inspect the operation processes at DTC - Inspect the written, driving skills, and on-site driving course test system
	12:00 ~17:00		- Interview the Head of the Testing Division - Examine the progress of the test applicant and staff surveys
Sept. 10 (Tues.) 3rd day	09:00 ~13:00	DTC KOICA Erbil Office	- Interview the Head of the Support Division - Inspect the maintenance and repair of vehicles
	13:00 ~17:00		- Collect the questionnaires and request translation - Request additional data related to the project from KOICA
Sept. 11 (Wed.) 4th day	09:00 ~11:00	KOICA Erbil Office	- Conduct an interim examination of the survey results and discuss the upcoming schedule
	11:00 ~12:00	KRG Ministry of Interior, Traffic Police	- Interview the Captains in Traffic Police, the Ministry of Interior - Collect data related to the project from KOICA
	12:00 ~17:00	DTC	- Conduct supplementary surveys
Sept. 12 (Thurs.) 5th day	09:00 ~12:00	DTC	- Perform a comprehensive analysis of the collected data
		KOICA Erbil Office	- Give a summarized report on the field survey (KOICA), etc.



4. List of Interviewees

NO	Name	Affiliation	Div./Position	Remark
1	Rzgar Ali Aziz	MOI*	Director General	
2	Azad Salih Khoshnaw	TF**	Major General	
3	Aram Burhan Jawad	DTC***	Major	Head of DTC
4	Ismael Yousif	DTC	Captain	Responsible for Test Management
5	Omid Abdull Mgeed	DTC	Captain	Responsible for Operation Support
6	Imad Al-Mufti	Safetico	Executive Officer	Maintenance & repair company
7	Salwan	Safetico	IT Engineer	
8	Hassan	Safetico	IT Engineer	
9	Min Bong-gwon	Neo Information System	Department Manager	
10	An Seung-gwon	Neo Information System	Section Manager	

* MOI: Ministry of Interior

** TF: Traffic Police

*** DTC: DTC



5. Content of Interview Recordings

a. Ministry of Interior (KRG)

○ Interview: Rzgar Ali Aziz (Director General, KRG Ministry of Interior General Traffic Police Directorate)

○ Time & Date: 11:00 ~ 12:00 on Sept. 11 (THU), 2013

- Interview location: General Traffic Police Directorate Office of the KRG Ministry of Interior
- Attendees: Director General, Director of KOICA Erbil Office, interpreter, and 3 investigators

<Table: Content of the Interview with the Director General, KRG Ministry of Interior General Traffic Police Directorate>

Question	Response
Situation at the time of project request	<ul style="list-style-type: none"> ◦ Annual rise in the income of KR citizens resulting in higher demand for vehicles ◦ 1 out every 2 people owned a car; there was a sharp increase in the number of vehicles, and the traffic-related facilities were not adequate to meet the demand ◦ Accordingly, the goal was to mitigate the problems related to the dramatic increase in the number of vehicles and the easy acquisition of driver's licenses ◦ There were frequent cases in which citizens obtained driver's licenses through friends or acquaintances working at the driving test center instead of going through the prescribed procedure
Presence of penalties (administrative dispositions) related to driver's licenses	<ul style="list-style-type: none"> ◦ An unlicensed driver is imposed a fine or sentenced to 6 months of imprisonment by a court of law; the police directly monitor various areas on a daily basis to crack down on unlicensed drivers ◦ Vehicle owners lending their vehicles to an unlicensed individual are also penalized and the vehicles that are operated by unlicensed drivers are also seized for a prescribed period of time
# of vehicle and licensed drivers in the Kurbistan Region	<ul style="list-style-type: none"> ◦ There has been an increased demand for vehicles resulting from improved quality of life, and there are some cases, in which a household of five members each has a car ◦ (There is not statistical system) Over 70% of the citizens take their driver's license test at the age of 18 ◦ At present, approx. 1.25 million people have a driver's license (incl. all types of driver's licenses even for motorized bicycles.)
Plans for extended application	<ul style="list-style-type: none"> ◦ Due to the prolonged waiting time, there are plans to establish two driving test centers in Erbil and Sulaymaniyah ◦ The Director General stated that more time is need to consider the extended application of the new licensing system and there are plans to extend the application in awareness of the need ◦ He expressed his hope to establish DTCs that apply more modern and advanced technologies

<Table: Content of the Interview with the Director General, KRG
Ministry of Interior General Traffic Police Directorate>

Question	Response
Reason for not using the license plate system	<ul style="list-style-type: none"> ◦ There is a project underway to create a system of license plates that are uniform in terms of color and shape, etc. to be applied throughout Iraq ◦ There have been discussions to seek measures to resolve technical problems and efforts are being made to use both Arabic and Kurdish languages ◦ Once these issues are resolved, the license plate system will be applied to all regions in Iraq incl. the Kurdistan Region
Attainment of policy goals	<ul style="list-style-type: none"> ◦ It was easy to acquire a driver's license in the past, but it has become more difficult with the introduction of the new licensing system and people will inevitably complain ◦ However, KRG Ministry of Interior is very satisfied with this outcome and wishes to extend the application of the system to other regions ◦ There has been continuous increase in traffic accidents in Iraq with an average of 1,000 deaths per year, and the high traffic accident rate has been reported frequently by the media ◦ The passing rate at DTC is currently 50% and this is viewed very positively ◦ In the past, the driving skills test was scored on paper, which led to unlawful acts of passing people who have actually failed because they are friends, etc.; however, the current computer-based system prevents this and this is regarded as a very positive outcome
Possibility of the establishing new DTCs with own budget?	<ul style="list-style-type: none"> ◦ It is deemed possible as there is budget allocated to the Ministry of Interior and to the traffic management sector

b. Erbil Traffic Police

- Interviewee: Azad Salih Khoshnaw (Major General, Traffic Police)
- Time & Date: 11:00 ~ 12:00 on Sept. 8 (SUN), 2013
- Interview location: Erbil Traffic Police Office
- Attendees: Major General, Director of KOICA Erbil Office, interpreter, 4 investigators, 2 employees of the technical partner company, and 2 employees of the local maintenance and repair company

<Table: Content of the Interview with the Major General of Traffic Police>

Question	Response
Did the project help reduce traffic accidents?	<ul style="list-style-type: none"> ◦ The DTC in Erbil has been operating normally for 1 year and 8 months since January 2012. It is difficult to discuss its effect on the reduction of traffic accidents based on the outcome of such short-term operation. It will take at least 10 years to determine its effect on the reduction rate.
Did the project help improve the traffic environment?	<ul style="list-style-type: none"> ◦ The new traffic management system has contributed greatly to the improvement of traffic-related issues in Erbil. ◦ However, its normal operation was delayed until the issue of designating a maintenance and repair company was resolved, and almost immediately afterwards, a plan to apply this system in other regions has been established. ◦ There is a need to introduce a more modern system to prevent the recurrence of the same problem.
Do you think there is a need to establish more DTCs?	<ul style="list-style-type: none"> ◦ The current system is operating normally at a very satisfying level, so I believe it should be implemented in other regions of Iraq.

c. Erbil DTC

- Interviewee: Aram Burhan Jawad (Major, Erbil DTC)
Ismael Yousif (Captain)
Omid Abdull Mgeed (Captain)
- Time & Date: 13:00 ~ 14:00 on Sept. 8 (SUN), 2013
- Interview location: Erbil DTC Office
- Attendees: Major, Captains of Test Management and Operation Support, Director of KOICA Erbil Office, interpreter, 4 investigators, 2 employees of the technical partner company, and 2 employees of the local maintenance and repair company

<Table: Content of the Interview with the Major of Erbil DTC>

Question	Response
What are the operation difficulties?	<ul style="list-style-type: none"> ◦ There were software problems (initially after establishment), but after selecting a maintenance and repair company (Safetico) to resolve the issues, it has improved to the current conditions.
Has there been a problem with the building?	<ul style="list-style-type: none"> ◦ There was a water leak in the building ceiling which required repair.
Average number of daily test applicants and DTC service users	<ul style="list-style-type: none"> ◦ There are 150 new applicants on average every day, with 700 people taking the tests. ◦ Most of the applicants, however, fail the test because they are not used to the new system and do not have the proper information on the test. ◦ The failure rate is high also because the applicants have not received sufficient explanations of the test procedure. So, for these reasons, we are planning share information and educate people on the test.
Number of DTC employees	<ul style="list-style-type: none"> ◦ There are currently 120 employees, and about 60 employees directly use system.
How does it compare to the previous system?	<ul style="list-style-type: none"> ◦ With the prior system, most people tried to unlawfully acquire their driver's license through a friend or acquaintance working at the driving test center and it was possible to acquire a driver's license in just an hour. ◦ However, with the new licensing system, it is difficult to obtain a driver's license unlawfully through a friend, and also the difficulty level of the test has been increased, especially for the parking skill test in the second test.
Reason for not using the license plate issuance system	<ul style="list-style-type: none"> ◦ We can't use it currently because there is a need to change all the vehicle numbers currently registered in the system.
Has the system contributed to Erbil's traffic policy?	<ul style="list-style-type: none"> ◦ It is operating successfully with the help of the Ministry of Interior, partner companies and technicians, and is contributing to the development of the traffic environment in Erbil. ◦ Because the DTC is receiving too many applicants, there are plans to establish a second DTC in Erbil to alleviate this problem.
Has the system contributed to the improvement of driving-related areas?	<ul style="list-style-type: none"> ◦ It has contributed to the improved driving skills of the test takers and the driving-related areas.



6. Questionnaire Items and Results

a. Overall (User) Satisfaction Survey

1) Survey Items

Items		Questions/Statements
1. Service environment (Accessibility)	Q1-1	The information on how to access DTC is provided in detail. (e.g.: DTC website, other administrative service guides, etc.)
	Q1-2	DTC was easy and convenient to access.
	Q1-3	DTC is well-equipped with guide and direction signs.
	Q1-4	Were you generally satisfied with the accessibility of DTC?
2. Service environment (Convenience)	Q2-1	It was easy to find the relevant division, reception desk and/or staff member in charge of providing the services I needed.
	Q2-2	It was easy to obtain information on the test prior to test application. (e.g.: DTC website, other administrative service guides, etc.)
	Q2-3	The offices and amenities for service users (waiting room, restroom, etc.) were clean.
	Q2-4	Were you generally satisfied with the DTC facilities and systems?
3. Service content (receipt, processing, procedure)	Q3-1	Test application, processing and procedure, etc. are convenient.
	Q3-2	There are diverse methods of test application, processing and procedure, etc. available.
	Q3-3	Test application, processing and procedure, etc. are quick and accurate.
	Q3-4	The relevant procedures from test application to license issuance are convenient and systematic.
	Q3-5	The notices on test application and schedules are conspicuous (DTC website, announcement board at DTC, etc.).
	Q3-6	DTC makes an effort to protect the personal information of its service users that is obtained during test application, processing and procedure, etc.
	Q3-7	Were you generally satisfied with the test application, processing and procedure?
4. Service delivery (staff)	Q4-1	The staff gave a sufficient and friendly explanation regarding the next procedure during application.
	Q4-2	The staff actively tried to assist the service users.

5. Overall satisfaction	Q4-3	The staff had a clean appearance.
	Q4-4	The staff gave quick and accurate responses to my inquiries.
	Q4-5	Were you generally satisfied with the attitude and behavior of the staff?
	Q5	How satisfied were you, considering all the services and facilities that you have experienced at DTC (test application, processing, procedure, vehicle and DTC facilities, restroom, staff services, etc.)?

2) Survey Results

	Gender		# of visits to DTC					Age group					Educational background			
	M	F	Once	Twice	Thrice	More than 4 times	10s	20s	30s	40s	50s	Over 60	Did not complete high school	High school diploma	College diploma or Bachelor's degree	
Total Score	80.1	78.5	83.4	87.9	76.1	79.5	80.2	81.3	78.9	86.1	74.1	86.4	-	82.9	81.3	77.0
Q1-1	76.2	73.8	81.0	85.7	85.7	64.3	75.8	75.0	77.8	78.6	64.3	85.7	-	66.7	79.4	76.2
Q1-2	87.3	84.5	92.9	100.0	85.7	92.9	85.7	82.1	88.9	92.9	85.7	85.7	-	95.2	82.5	90.5
Q1-3	75.4	78.6	69.0	85.7	64.3	71.4	76.9	71.4	79.4	64.3	85.7	57.1	-	81.0	74.6	73.8
Q1-4	83.3	82.1	85.7	100.0	85.7	92.9	80.2	78.6	81.0	92.9	100.0	71.4	-	100.0	79.4	81.0
Q2-1	80.2	79.8	81.0	100.0	100.0	100.0	72.5	85.7	71.4	100.0	85.7	85.7	-	100.0	79.4	71.4
Q2-2	74.6	67.9	88.1	85.7	42.9	85.7	76.9	78.6	74.6	85.7	78.6	28.6	-	85.7	66.7	81.0
Q2-3	74.6	69.0	85.7	100.0	64.3	71.4	74.7	71.4	77.8	92.9	64.3	42.9	-	90.5	66.7	78.6
Q2-4	65.9	64.3	69.0	85.7	64.3	57.1	65.9	71.4	65.1	78.6	57.1	42.9	-	81.0	66.7	57.1
Q3-1	77.8	76.2	81.0	85.7	78.6	50.0	81.3	78.6	87.3	71.4	57.1	42.9	-	81.0	77.8	76.2
Q3-2	77.0	72.6	85.7	85.7	100.0	92.9	70.3	67.9	82.5	92.9	78.6	28.6	-	95.2	65.1	85.7
Q3-3	69.8	67.9	73.8	57.1	85.7	50.0	71.4	64.3	79.4	57.1	57.1	57.1	-	66.7	69.8	71.4
Q3-4	75.4	77.4	71.4	71.4	85.7	85.7	72.5	75.0	73.0	78.6	78.6	85.7	-	81.0	77.8	69.0
Q3-5	76.2	76.2	76.2	85.7	57.1	92.9	75.8	75.0	69.8	92.9	78.6	100.0	-	66.7	84.1	69.0
Q3-6	87.3	84.5	92.9	100.0	92.9	85.7	85.7	89.3	87.3	92.9	78.6	85.7	-	95.2	88.9	81.0
Q3-7	80.2	78.6	83.3	85.7	92.9	71.4	79.1	75.0	82.5	85.7	78.6	71.4	-	85.7	81.0	76.2
Q4-1	87.3	85.7	90.5	100.0	100.0	92.9	83.5	75.0	90.5	100.0	78.6	100.0	-	100.0	85.7	83.3
Q4-2	74.6	67.9	88.1	85.7	57.1	71.4	76.9	64.3	76.2	78.6	71.4	100.0	-	47.6	76.2	85.7
Q4-3	84.1	81.0	90.5	100.0	85.7	100.0	80.2	82.1	81.0	100.0	85.7	85.7	-	95.2	81.0	83.3
Q4-4	88.1	86.9	90.5	100.0	92.9	85.7	86.8	89.3	87.3	92.9	78.6	100.0	-	95.2	92.1	78.6
Q4-5	89.7	88.1	92.9	100.0	92.9	92.9	87.9	85.7	87.3	100.0	92.9	100.0	-	85.7	93.7	85.7
Q5	81.0	79.8	83.3	85.7	71.4	78.6	82.4	85.7	77.8	85.7	71.4	100.0	-	81.0	84.1	76.2
Response Subjects	18	12	6	1	2	2	13	4	9	2	2	1	0	3	9	6

b. Written Test User Satisfaction Survey

1) Survey Items

Items		Questions/Statements
1. Service content (receipt, processing, procedure)	Q1-1	The written test application, processing and procedure, etc. are convenient.
	Q1-2	There are diverse methods of written test application, processing and procedure, etc. available.
	Q1-3	The written test application, processing and procedure, etc. are quick and accurate.
	Q1-4	Were you generally satisfied with the written test application, processing and procedure?
2. Service environment (written test environment)	Q2-1	It is simple to obtain a guide book to study for the written test (sold at DTC or bookstore, etc.).
	Q2-2	I was satisfied with the DTC facilities for the written test (e.g., desk, chair, print conditions of the test, etc.).
	Q2-3	The waiting time for the written test was appropriate.
	Q2-4	The result of the written test (pass/fail) is announced quickly after the test is complete.
	Q2-5	Were you generally satisfied with the seating arrangement, order of the test, etc. for the written test?
3. Service delivery (staff)	Q3-1	I was given sufficient explanation regarding the written test such as tips and the scoring system prior to the test.
	Q3-2	The test supervisor actively responded to the inquiries from the written test takers.
	Q3-3	The test supervisor was friendly to the written test takers.
	Q3-4	The test supervisor had a clean appearance.
	Q3-5	The test supervisor provided friendly and detailed explanations to the inquiries regarding the written test.
	Q3-6	Were you generally satisfied with the attitude and behavior of the test supervisor?
4. Service delivery (written test)	Q4-1	The number of questions and the time limit for the written test were adequate.
	Q4-2	The written test was not difficult (it was easy and not complicated).
	Q4-3	The questions on the written test were evenly divided into different categories (laws, regulations, signs, traffic signals, vehicle structure, etc.).
	Q4-4	The assessment method of the written test was reasonable.
	Q4-5	Were you generally satisfied with the difficulty level and the assessment method of the written test?
5. Service content (post-test)	Q5-1	It was convenient to access information regarding the post-test procedures. (e.g. access to information through explanations provided by the test supervisor or through other administrative info services)

Items		Questions/Statements
	Q5-2	Were you satisfied with the explanation you were given regarding the post-test procedure after the written test? (e.g. information on the issuance of 'passing' card for those who passed the test and information on the re-testing procedure for those who failed the test)
	Q5-3	Were you generally satisfied with the written test application, processing and procedure, and the ease of obtaining information on the written test?
6. Overall satisfaction	Q6	How satisfied were you, considering all the services and facilities that you have experienced at DTC (written test application, processing, procedure, testing environment, test quality, post-test quality) during your visit to take the written test?

2) Survey Results

	Gender		# of visits to DTC					Age group						Educational background		
	M	F	Once	Twice	Thrice	More than 4 times	10s	20s	30s	40s	50s	Over 60	Did not complete high school	High school diploma	College diploma or Bachelor's degree	
Total Score	81.4	80.8	82.7	83.9	68.5	72.0	-	96.2	74.5	98.4	58.4	-	-	81.5	84.0	74.7
Q1-1	85.7	85.7	85.7	88.8	64.3	85.7	-	97.1	82.9	85.7	57.1	-	-	76.2	90.0	82.1
Q1-2	80.7	85.7	68.6	82.7	64.3	85.7	-	97.1	75.7	71.4	57.1	-	-	81.0	84.3	71.4
Q1-3	81.5	83.3	77.1	84.7	57.1	85.7	-	85.7	80.0	100.0	57.1	-	-	81.0	85.7	71.4
Q1-4	88.2	86.9	91.4	91.8	64.3	85.7	-	88.6	87.1	100.0	85.7	-	-	71.4	92.9	89.3
Q2-1	82.4	79.8	88.6	85.7	71.4	57.1	-	85.7	77.1	100.0	100.0	-	-	57.1	90.0	82.1
Q2-2	84.9	86.9	80.0	89.8	57.1	71.4	-	91.4	82.9	100.0	57.1	-	-	76.2	90.0	78.6
Q2-3	85.7	86.9	82.9	90.8	64.3	57.1	-	97.1	84.3	85.7	42.9	-	-	81.0	88.6	82.1
Q2-4	85.7	86.9	82.9	90.8	64.3	71.4	-	88.6	85.7	100.0	57.1	-	-	81.0	87.1	85.7
Q2-5	86.6	84.5	91.4	90.8	71.4	57.1	-	94.3	81.4	100.0	85.7	-	-	81.0	88.6	85.7
Q3-1	84.0	85.7	80.0	89.8	42.9	85.7	-	100.0	77.1	100.0	57.1	-	-	71.4	88.6	82.1
Q3-2	83.2	84.5	80.0	88.8	64.3	42.9	-	97.1	77.1	100.0	57.1	-	-	90.5	85.7	71.4
Q3-3	83.2	83.3	82.9	87.8	71.4	42.9	-	100.0	77.1	100.0	42.9	-	-	85.7	85.7	75.0
Q3-4	84.0	83.3	85.7	87.8	78.6	42.9	-	97.1	80.0	85.7	57.1	-	-	90.5	85.7	75.0
Q3-5	88.2	86.9	91.4	91.8	85.7	42.9	-	100.0	84.3	100.0	57.1	-	-	90.5	88.6	85.7
Q3-6	78.2	82.1	68.6	82.7	64.3	42.9	-	97.1	70.0	100.0	42.9	-	-	90.5	78.6	67.9
Q4-1	80.7	81.0	80.0	86.7	57.1	42.9	-	85.7	78.6	100.0	57.1	-	-	66.7	87.1	75.0
Q4-2	79.8	83.3	71.4	84.7	64.3	42.9	-	88.6	77.1	100.0	42.9	-	-	81.0	78.6	82.1
Q4-3	79.0	76.2	85.7	84.7	57.1	42.9	-	80.0	78.6	100.0	57.1	-	-	52.4	88.6	75.0
Q4-4	82.4	78.6	91.4	86.7	71.4	42.9	-	80.0	81.4	100.0	85.7	-	-	57.1	90.0	82.1
Q4-5	81.5	78.6	88.6	85.7	71.4	42.9	-	91.4	77.1	100.0	57.1	-	-	71.4	85.7	78.6
Q5-1	78.2	78.6	77.1	83.7	57.1	42.9	-	94.3	70.0	100.0	57.1	-	-	76.2	80.0	75.0
Q5-2	79.8	78.6	82.9	83.7	71.4	42.9	-	94.3	74.3	100.0	42.9	-	-	85.7	81.4	71.4
Q5-3	83.2	82.1	85.7	84.7	71.4	85.7	-	94.3	78.6	100.0	57.1	-	-	81.0	90.0	67.9
Q6	79.8	78.6	82.9	80.6	71.4	85.7	-	100.0	70.0	100.0	57.1	-	-	85.7	81.4	71.4
Response Subjects	17	12	5	14	2	1	0	5	10	1	1	0	0	3	10	4

c. Driving Skills Test User Satisfaction Survey

1) Survey Items

Items		Questions/Statements
1.Service content (receipt, processing, procedure)	Q1-1	The driving skills test application, processing and procedure, etc. are convenient.
	Q1-2	There are diverse methods of driving skills test application, processing and procedure, etc. available.
	Q1-3	The driving skills test application, processing and procedure, etc. are quick and accurate.
	Q1-4	Were you generally satisfied with the driving skills test application, processing and procedure?
2.Service environment (vehicle and driving course)	Q2-1	I was satisfied with the vehicle I was assigned for the driving skills test. (e.g. aging and quality of vehicle, etc.)
	Q2-2	The order of the driving skills test was fair.
	Q2-3	Were you generally satisfied with the assigned vehicle and test order, etc.?
3.Service delivery (staff)	Q3-1	I was given sufficient explanation regarding the driving skills test such as the scoring and implementation system prior to the test.
	Q3-2	The test supervisor actively responded to the inquiries from the driving skills test takers.
	Q3-3	The test supervisor was friendly to the driving skills test takers.
	Q3-4	Th test supervisor had a clean appearance.
	Q3-5	The test supervisor provided friendly and detailed explanations to the inquiries regarding the driving skills test.
	Q3-6	The test supervisor was fair to all test applicants.
	Q3-7	Were you generally satisfied with the attitude and behavior of the test supervisor?
4.Service delivery (driving skills test)	Q4-1	The 1st driving skills test was not difficult (it was easy and not complicated).
	Q4-2	The 2nd driving skills test was not difficult (it was easy and not complicated).
	Q4-3	The assessment method of the driving skills test was reasonable.
	Q4-4	Were you generally satisfied with the difficulty level and the assessment method of the driving skills test?
5.Service content (post-test)	Q5-1	It was convenient to access information regarding the post-test procedures. (e.g. access to information through explanations provided by the test supervisor or through other administrative info services)
	Q5-2	Were you satisfied with the explanation you were given regarding the post-test procedure after the driving skills test? (e.g. information on the issuance of 'passing' card for those who passed the test and information on the re-testing procedure for those who failed the test)
	Q5-3	Were you generally satisfied with the driving skills test application, processing and procedure, and the ease of obtaining information on the driving skills test?
6.Overall Satisfaction	Q6	How satisfied were you, considering all the services and facilities that you have experienced at DTC (driving skills test application, processing, procedure, testing environment, test quality, post-test quality) during your visit to take the driving skills test?

2) Survey Results

	Gender		Pass/Fail		Age group							Educational background				
	M	F	Pass	Fail	10s	20s	30s	40s	50s	Over 60	No response	Did not complete high school	High school diploma	College diploma or Bachelor's degree	No response	
Total Score	70.2	69.8	71.2	74.7	55.6	78.9	62.2	85.0	68.7	-	-	65.6	81.0	75.6	59.0	45.9
Q1-1	58.8	60.7	54.3	71.4	17.9	88.1	40.8	28.6	14.3	-	-	71.4	32.1	75.5	60.0	42.9
Q1-2	58.8	54.8	68.6	68.1	28.6	76.2	46.9	42.9	57.1	-	-	57.1	39.3	59.2	65.7	100.0
Q1-3	52.9	59.5	37.1	64.8	14.3	78.6	44.9	57.1	14.3	-	-	21.4	57.1	55.1	51.4	28.6
Q1-4	58.8	63.1	48.6	72.5	14.3	81.0	49.0	100.0	14.3	-	-	28.6	71.4	57.1	54.3	42.9
Q2-1	68.9	70.2	65.7	73.6	53.6	92.9	46.9	85.7	85.7	-	-	57.1	92.9	75.5	45.7	42.9
Q2-2	66.4	63.1	74.3	69.2	57.1	66.7	67.3	100.0	85.7	-	-	35.7	89.3	51.0	71.4	57.1
Q2-3	65.5	60.7	77.1	70.3	50.0	69.0	55.1	85.7	85.7	-	-	71.4	60.7	71.4	65.7	42.9
Q3-1	74.8	75.0	74.3	78.0	64.3	100.0	65.3	100.0	71.4	-	-	21.4	100.0	79.6	57.1	28.6
Q3-2	76.5	76.2	77.1	81.3	60.7	90.5	63.3	100.0	71.4	-	-	71.4	96.4	81.6	57.1	57.1
Q3-3	73.9	75.0	71.4	75.8	67.9	81.0	65.3	100.0	85.7	-	-	64.3	89.3	81.6	57.1	42.9
Q3-4	72.3	78.6	57.1	73.6	67.9	71.4	67.3	100.0	85.7	-	-	71.4	78.6	85.7	54.3	42.9
Q3-5	67.2	63.1	77.1	73.6	46.4	59.5	71.4	100.0	57.1	-	-	64.3	78.6	63.3	65.7	57.1
Q3-6	59.7	58.3	62.9	67.0	35.7	59.5	55.1	100.0	42.9	-	-	64.3	71.4	61.2	54.3	28.6
Q3-7	68.1	67.9	68.6	71.4	57.1	59.5	77.6	100.0	57.1	-	-	50.0	67.9	67.3	77.1	28.6
Q4-1	68.9	73.8	57.1	73.6	53.6	83.3	55.1	100.0	57.1	-	-	64.3	78.6	83.7	48.6	28.6
Q4-2	68.9	69.0	68.6	71.4	60.7	78.6	61.2	71.4	71.4	-	-	64.3	71.4	79.6	57.1	42.9
Q4-3	73.1	69.0	82.9	74.7	67.9	81.0	65.3	85.7	85.7	-	-	64.3	82.1	81.6	57.1	57.1
Q4-4	65.5	64.3	68.6	67.0	60.7	73.8	55.1	71.4	85.7	-	-	64.3	78.6	79.6	42.9	28.6
Q5-1	75.6	76.2	74.3	80.2	60.7	100.0	51.0	71.4	85.7	-	-	85.7	89.3	89.8	45.7	71.4
Q5-2	77.3	76.2	80.0	82.4	60.7	90.5	65.3	85.7	85.7	-	-	71.4	92.9	81.6	60.0	71.4
Q5-3	79.8	78.6	82.9	85.7	60.7	83.3	71.4	85.7	85.7	-	-	92.9	85.7	83.7	68.6	85.7
Q6	72.3	71.4	74.3	75.8	60.7	78.6	65.3	85.7	71.4	-	-	71.4	85.7	77.6	60.0	42.9
Response Subjects	17	12	5	13	4	6	7	1	1	0	0	2	4	7	5	1

d. DTC Staff Satisfaction Survey

1) Survey Items

Items	Questions/Statements
1. Service (Working) environment	Q1 How satisfied are you with the working environment of Erbil DTC at which you work?
2. Service environment (DTC system)	Q2-1 DTC is well-equipped with the system for a wide range of services from test application receipt to driver's license issuance.
	Q2-2 The written test process is convenient. (waiting time, scoring, etc.)
	Q2-3 The driving skills test application receipt and process are convenient and fair.
	Q2-4 The user satisfaction with the driving skills test scores are high.
	Q2-5 There is no inconvenience with respect to the portability and storage of the driver's license card.
3. Local development (regional impact)	Q3 To what extent has DTC contributed to the local development, in your opinion?
4. Service quality (extended application)	Q4 Based on the increasing demand for driver's license acquisition at DTC, do you believe that there is a need to establish additional DTCs or extend the current DTC?
5. Service quality (validity of project)	Q5 The following is a question regarding the Project for Construction of a Driving Test Center in Erbil (2006). Do you believe that the project was valid, considering the increased income and demand for driver's license acquisition among citizens?

2) Survey Results

	Working period at DTC					Assigned work					Age group						Educational background		
	Less than 1 year	Over 1 year	Over 2 years	Over 3 years	Over 4 years	Reception desk	Test supervisor	License issuance	Other	10s	20s	30s	40s	50s	Over 60s	Did not complete high school	High school diploma	College diploma or Bachelor's degree	
Total Score	84.3	-	74.6	85.9	86.1	86.0	80.0	86.2	88.9	87.3	-	87.1	82.0	-	-	-	86.8	85.0	81.4
Q1	95.0	-	81.0	95.9	100.0	97.6	89.3	100.0	100.0	98.2	-	98.4	92.2	-	-	-	100.0	98.0	87.8
Q2-1	95.7	-	81.0	98.0	100.0	97.6	89.3	100.0	100.0	100.0	-	98.4	93.5	-	-	-	95.2	100.0	91.8
Q2-2	95.0	-	81.0	93.9	100.0	100.0	91.1	95.2	100.0	98.2	-	96.8	93.5	-	-	-	100.0	98.0	87.8
Q2-3	95.0	-	85.7	95.9	96.4	97.6	91.1	100.0	100.0	96.4	-	96.8	93.5	-	-	-	95.2	95.9	93.9
Q2-4	81.4	-	61.9	85.7	78.6	88.1	76.8	76.2	85.7	87.5	-	90.5	74.0	-	-	-	85.7	79.6	79.6
Q2-5	18.6	-	14.3	26.5	14.3	14.3	14.3	42.9	14.3	14.3	-	14.3	22.1	-	-	-	14.3	26.5	14.3
Q3	91.4	-	71.4	89.8	100.0	97.6	85.7	85.7	100.0	98.2	-	98.4	85.7	-	-	-	95.2	91.8	87.8
Q4	97.9	-	100.0	98.0	100.0	95.2	98.2	100.0	100.0	96.4	-	98.4	97.4	-	-	-	97.6	98.0	98.0
Q5	88.6	-	95.2	89.8	85.7	85.7	83.9	76.2	100.0	96.4	-	92.1	85.7	-	-	-	97.6	77.6	91.8
Response Subjects	20	0	3	7	4	6	8	3	1	8	0	9	11	0	0	0	6	7	7

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