

資料 - 5

討議議事録

5. 討議議事録

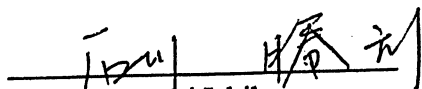
MINUTES OF DISCUSSIONS  
ON  
IMPLEMENTATION REVIEW STUDY  
ON  
THE PROJECT FOR REHABILITATION OF WATER DISTRIBUTION PIPELINES  
IN DAMASCUS CITY (Phase II)  
IN SYRIAN ARAB REPUBLIC

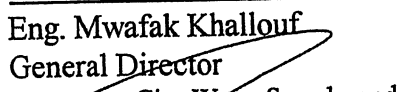
In response to the request from the Government of Syrian Arab Republic, the Government of Japan decided to conduct the Implementation Review Study on the Project for Rehabilitation of Water Distribution Pipelines in Damascus City (Phase II) (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (JICA).

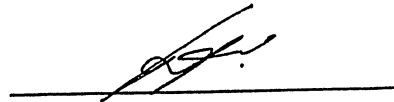
JICA sent to Syrian Arab Republic the Implementation Review Team, which is headed by Mr. Katsutoshi ISHIKAWA, Grant Aid Division, Bureau of Economic Cooperation, Ministry of Foreign Affairs (hereinafter referred to as "the Team"), and is scheduled to stay in Syria from December 6 to 25, 2001. The Team held discussions with the officials concerned of Syrian Arab Republic and conducted a field survey at the study area.

In the course of discussions and field survey, both sides confirmed the main items described on the attached sheets. The Team will proceed further works and prepare the report of the Study for the Implementation Review.

Damascus, December 12, 2001

  
Mr. Katsutoshi Ishikawa  
Leader  
Implementation Review Study Team  
Japan International Cooperation Agency

  
Eng. Mwafak Khallouf  
General Director  
Damascus City Water Supply and  
Sewerage Authority

  
Mr. M. Bassam Al Sibai  
Director of Technical and Scientific  
Cooperation,  
State Planning Commission

## ATTACHMENT

### 1. Objective

The Objective of the Project is to contribute the reduction of water losses in the water distribution network by supplying the necessary materials to replace the leaking distribution mains.

### 2. Project site

The Project Site is shown as Annex I.

### 3. Responsible and Implementing Agency

(1) Responsible Agency of the Project is Ministry of Housing and Utilities.

(2) Implementing Agency of the Project is Damascus City Water Supply and Sewerage Authority (DAWSSA).

### 4. Items requested by Syrian side

After discussion with the Team, the items finally requested by the Syrian side are shown in ANNEX II

Both sides agreed that as the result of the study, minor modification on quantity might be made for practical formation of distribution networks.

### 5. Japan's Grant Aid Scheme

The Syrian side has understood the system of Japan's Grant Aid Programme in ANNEX III as explained by the Team and will take the necessary measures described in ANNEX IV for smooth implementation of the Project.

### 6. Schedule of the Study

- (1) The consultants of the Team will proceed to further studies in Syria until 25 December 2001.
- (2) JICA will complete the final report and send it to the Government of Syria around April 2002.



## 7. Other relevant issues

The followings were discussed and confirmed by both sides.

(1) The following phasing was confirmed is appropriate.

- 1) First Year : Kafarsouseh, Bagdad, Berzeh
- 2) Second Year : Mezzeh, Midan

(2) Allocation of budget and staff:

The Syrian side will allocate the necessary budget and staff for implementation of the Project.

(3) Installation of material:

The Syrian side will complete the installation of materials to be provided under the Project promptly.

(4) Stockyard and Garage:

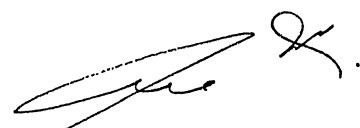
The Syrian side will prepare the stockyard and garage exclusively for the materials procured by the Project.

(5) Soft Component:

It is necessary for the Project to include the soft component to support the expansion of training activities for ensuring high quality of operation and maintenance of the Project in the future.

(6) Visibility:

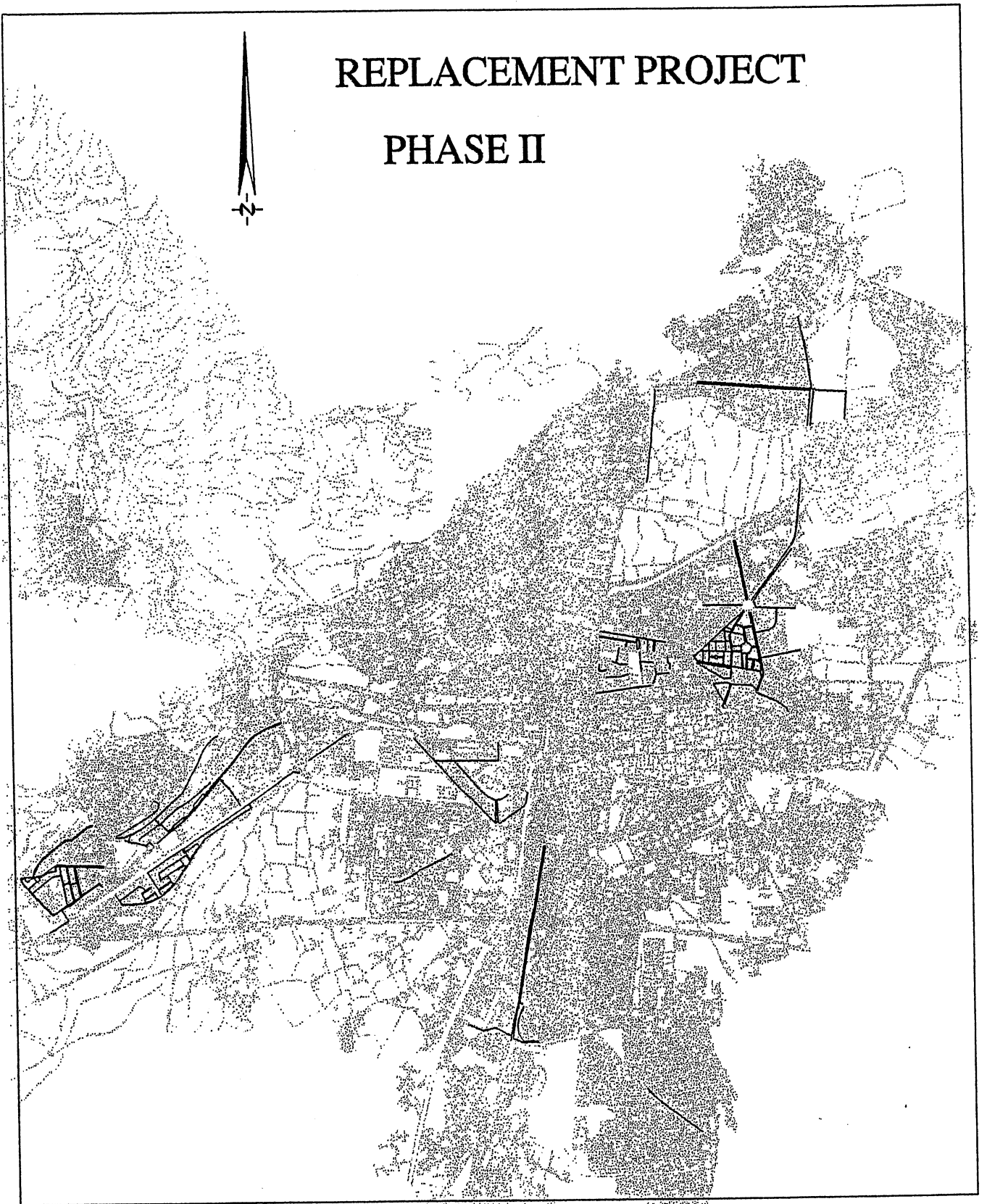
The Syrian side will take necessary measures to secure high visibility of the Project, such as plates for advertisement of the donor during the construction works.



ANNEX-I

REPLACEMENT PROJECT

PHASE II



*[Handwritten signature]* K2

## ANNEX-II

## LIST OF PIPE LENGTH

YEAR	AREA		TOTAL (km)
1 <sup>st</sup> year	K	Kafarsouseh	5.8
	B	Bagdad	23.0
	Z	Berzeh	9.7
2 <sup>nd</sup> year	M	Mezzeh	23.1
	I	Midan	6.9
TOTAL (km)			68.5



## Annex-III

### Japan's Grant Aid Programme

#### 1. Grant Aid Procedures

(1) Japan's Grant Aid Program is executed through the following procedures.

- **Application** (A request made by the recipient country)
- **Study** (Basic Design Study conducted by JICA)
- **Appraisal & Approval** (Appraisal by the Government of Japan and Approval the Cabinet of Japan)
- **Determination** (Exchange of Notes between the Governments of Japan and the recipient country)
- **Implementation** (Implementation of the Project)

(2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is suitable for Japan's Grant Aid. If the request is deemed suitable, the Government of Japan entrusts a study on the request to JICA (Japan International Cooperation Agency).

Secondly, JICA conducts the study (Basic Design Study) using (a) Japanese consulting firm(s). If the backgrounds and objective of the requested project are not clear, a Preparatory Study is conducted prior to a Basic Design Study.

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Programme, based on the Basic Design Study Report prepared by JICA, and the results are then submitted to the Cabinet for an approval.

Fourthly, the project, once approved by the Cabinet, becomes official when pledged by the Exchange of Notes signed by the Governments of Japan and recipient country.

Finally, for the implementation of the project, JICA will assist the recipient country in such matters as preparing tenders, contract and so on.

#### 2. Basic Design Study

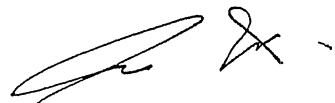
(1) Contents of the study

The purpose of the Study (Preparatory / Basic Design Study) conducted on a project requested by JICA is to provide a basic document necessary for appraisal of the Project by the Japanese Government. The contents of the Study are as follows:

- a) To confirm background, objectives, and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for Project implementation.
- b) To evaluate appropriateness of the Project for the Grant Aid Scheme from a technical, social and economic point of view.
- c) To confirm items agreed on by the both parties concerning the basic concept of the Project.
- d) To prepare a basic design of the Project.
- e) To estimate costs involved in the Project.

Final project components are subject to approval by the Government of Japan and therefore may differ from an original request.

Implementing the project, the Government of Japan requests the recipient country to



take necessary measures involved which is itemized on Exchange of Notes.

(2) Selection of Consultants

For smooth implementation of the Study, JICA uses (a) registered consultant firm(s) registered. JICA selects (a) firm(s) through proposals submitted by firms that are interested. The firm(s) selected carry (ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA.

The consultant firm(s) used for the Study is (are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency.

(3) Status of a Preparatory Study in the Grant Aid Programme

A Preparatory Study is conducted during the second step of a project formulation & preparation as mentioned above.

A result of the study will be utilized in Japan to decide if the Project is to be suitable for a Basic Design Study.

Based on the result of the Basic Study, the Government would proceed to the stage of decision making process (appraisal and approval).

It is important to notice that at the stage of Preparatory Study, no commitment is made by the Japanese side concerning the realization of the Project in the scheme of Grant Aid Programme.

### 3. Japan's Grant Aid Scheme

(1) What is Grant Aid?

The Grant Aid Programme provides a recipient country with non-reimbursable funds needed to procure the facilities, equipment and services for economic and social development of the country under the following principles in accordance with the relevant laws and regulations of Japan. Grant Aid is not a form of donation or such.

(2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

(3) Period

"The period of the Grant Aid" means the one fiscal year that the Cabinet approves the Project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and final payment to them must be completed.

(4) Purchase of the Products and or Services

Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However, the prime contractors, namely, consulting constructing and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

(5) Necessity of "Verification"

The Government of recipient country or its designated authority will conclude



contracts denominated in Japanese yen with Japanese nationals. The Government of Japan shall verify those contracts. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

(6) Undertakings required of the Government of the Recipient Country  
(As described in Annex-IV)

(7) Proper Use

The recipient country is required to maintain and use the facilities constructed and the equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

(8) Re-export

The products purchased under the Grant Aid should not be re-exported from the recipient country.

(9) Banking Arrangements (B/A)

a) The Government of the recipient country or its designated authority shall open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the contracts verified.

b) The payments will be made when the Bank presents payment requests to the Government of Japan under an Authorization to Pay issued by the Government of the recipient country or its designated authority.



## Annex-IV

### Necessary Measures to be taken by the Government of the Syrian Arab Republic

Following necessary measures should be taken by the on condition that the Grant Aid by the Government of Japan is extended to the Project:

1. To provide data and information necessary for the Project.
2. To secure land for the sites fo the Project.
3. To clear the sites prior to commencement of the construction.
4. To provide facilities for distribution of electricity, water supply, drainage and other incidental facilities outside the side.
5. To bear commissions to the Japanese foreign exchange bank for its banking services based upon the Banking Arrangement, namely the advising commission of the "Authorization to Pay" and payment commission.
6. To ensure prompt unloading, tax exemption, customs clearance at the port of disembarkation and prompt internal transportation therein of the materials and equipment for the Project purchased under the Grant Aid.
7. To exempt Japanese juridical and physical nationals engaged in the Project from customs duties, internal taxes and other fiscal levies which may be imposed in Syria with respect to the supply of the products and services under the verified contracts.
8. To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into Syria and stay therein for the performance of their work in accordance with the relevant laws and regulations of the Syrian Arab Republic.
9. To assign the necessary staff and secure the necessary budget for operation and maintenance of the materials purchased under the Project.
10. To maintain and use properly and effectively the materials provided under the Project
11. To maintain and use properly and effectively the facilities constructed under the Project
12. To coordinate and solve any issues related to the Project which may be raised from the their parties or inhabitants in the Project area during implementation of the Project.
13. To bear all the expenses, other than those to be borne by the Japan's Grant Aid within the scope of the Project.



受信  
2002. 1. -8  
都市開発・上下  
水道部



**DAMASCUS CITY WATER SUPPLY & SEWERAGE AUTHORITY**

El-Nassr Street, Damascus Syrian Arab Republic

Number : / 1 /15  
Date : 1/21/2002

**To JICA Syria Office Urgent**

07

2002/1/21

Mr. Katsutoshi ISHIKAWA  
Team Leader  
Implementation Review Study Team  
Japan International Cooperation Agency

**Re: The Project for Rehabilitation of Water Distribution Pipelines In  
Damascus City (Phase II)**

With reference to the minutes of discussions held on December 12, 2001 regarding the captioned project, we would like to request you the following modifications of distribution pipeline length and phasing according to the result of our recent review.

- 1) Total pipe length: 68.5 km to 75.1 km including additional pipe length in Midan and Mezeh area.
- 2) Phasing: Midan area is changed from 2<sup>nd</sup> year to 1<sup>st</sup> year due to urgent request of pipe replacement.

In accordance with the above modification, the final proposed pipe length is summarized as the following table.

Year	Area	Total (km)
1 <sup>st</sup> year	K Kafarsouseh	5.8
	B Bagdad	23.0
	Z Berzeh	9.7
	I Midan	11.5
2 <sup>nd</sup> year	M Mezzeh	25.1
Total (km)		75.1

Your kind consideration and acceptance on this matter would be highly appreciated.

Sincerely yours,

General director

En. Muwafak Khallouf

Copy to: Mr. M. Bassam Al Sibai  
State Planning Commission

資料 - 6

事前評価表

## 事業事前評価表

1. 協力対象事業名	シリア・アラブ共和国 ダマスカス市内配水管改修計画フェーズ 2
2. 我が国が援助することの必要性・妥当性	<p>(1) シリアは、中東和平実現の鍵を握る重要な国であり、中東和平プロセスに当事国として参加している。我が国は同国のさらに積極的な参加を促すために、同国民生の向上に資する各形態による経済協力を実施している。</p> <p>(2) シリア国の首都であるダマスカス市は、近年の人口増加や工業開発等による水需要の増大により、夏期を中心とする乾期には半日以上が断水状態となり、市民生活及び産業活動における水不足は深刻な状況となっている。この事態を改善すべく、シリア国政府の要請を受けて日本政府は「ダマスカス市給水システム改善拡充計画」として開発調査（1996年から1997年）を実施した。調査の結果、水不足は無収水率が64%と高いことに起因しており、その主な原因として、老朽配水管からの漏水と無許可居住地区での不法取水によることが明らかとなった。同調査では、2015年までに無収水率を25%まで削減することを目標として、以下の改善策を提言した。</p> <ul style="list-style-type: none"> <li>・ 無許可居住地区での水道施設整備</li> <li>・ 漏水量の削減対策 <ul style="list-style-type: none"> <li>i) 漏水調査の強化</li> <li>ii) 配水ブロック化による漏水監視</li> <li>iii) 配水本管の更新</li> <li>iv) 維持管理用機材の更新</li> </ul> </li> </ul> <p>ダマスカス市上下水道公社（DAWSSA）は漏水削減対策に関する緊急事業として、配水本管の更新計画を策定した。平成10年度から12年度に本計画のフェーズ1事業（無償資金協力）により、ダマスカス市街地の中心部に位置するワリ、マルキ、オールドシティ、大統領官邸、ナサール地区を対象地域とした配水管（延長約46km）の改修がなされた。</p> <p>一方、フェーズ1事業で市街地中心部の配水管の改修が進んだことにより、本計画の対象地区である市街地外周部への配水が正規水圧に上昇し、その結果フェーズ2対象地区の铸铁配水管からの漏水が増加する傾向にある。このためカファルスセ、バグダッド、ベルゼ、ミダン及びメゼ地区の铸铁管約75kmの更新が緊急課題となっている。</p>
3. 協力対象事業の目的（プロジェクト目標）	ダマスカス市民への水の安定供給ができる。
4. 協力対象事業の内容	<p>(1) 対象地域 ダマスカス市内の外周部に位置するカファルスセ、バグダッド、ベルゼ、ミダン及び、メゼの5地区</p>

- (2) アウトプット  
 ・ ダマスカス市内対象地域の老朽鋳鉄配水管 75 km が改修される
- (3) インプット  
 ・ 配水管改修に必要なダクタイル鋳鉄管、異形管等の配水管資材の調達  
 ・ 施工管理技術の向上とデータデジタル化による維持管理システム改善のためのソフトコンポーネント  
 i) 工場のスポット監理  
 ii) 施工管理マニュアルの作成  
 iii) 工事進捗管理技術の指導  
 iv) データデジタル化への計画書の作成
- (4) 総事業費  
 概算事業費：16.9 億円（日本側 11.3 億円、シリア側 5.6 億円）
- (5) スケジュール  
 実施設計を含め約 24 ヶ月間を予定
- (6) 実施体制  
 シリア・アラブ共和国 ダマスカス市上下水道公社 (DAWSSA)

## 5. プロジェクトの成果

- (1) プロジェクトにて裨益を受ける対象の範囲および規模

裨益人口は対象地域に居住する 103 万人。

- (2) 事業の目的（プロジェクト目標）を示す成果指標

	2000年 (実施前)	2005年 (実施後)
漏水率(%)	27.2	25.0

漏水の削減により年間約 67 万米ドルの料金収入の増収が期待でき、DAWSSA の収益が向上する。また漏水修理費用の減少が期待される。さらにダマスカス市民への安全で安定した給水を提供できる。

- (3) その他の成果指標

漏水事故による修理件数（2001 年：1,132 件）が減少する。

## 6. 外部要因リスク

- (1) シリア側による管布設工事の実施

シリア側は工事实施に必要な予算措置を行い、実施計画に従った管布設工事を実施する。また実施に際しては、工事管理組織を設立し、工事計画に合わせた工事許可の取得や請負業者の進捗管理を確実に実施する。

- (2) 維持管理の継続した実施

管布設工事の完成後は、復元漏水に対して定期的な漏水調査の実施と漏水箇所の修理等、継続し

た維持管理の実施が必要となる。

## 7. 今後の評価計画

### (1) 事後評価に用いる成果指標

- 1) 漏水率
- 2) 漏水事故による修理件数

### (2) 評価のタイミング

2005 年を目処に事後評価を予定。

資料 - 7

入手資料リスト



## 7. 入手資料リスト

No.	資料名	発行年	発行者
1	DAWSSA 組織図	2001.7	DAWSSA
2	住宅公共事業省組織図		
3	General Environmental Impact Assessment Guideline	1995	World Bank/European Investment Bank