南アフリカ水衛生省（DWS）
インフラ整備局研修センター（IBTC, DWS）
南アフリカ地方自治協会（SALGA）

南アフリカ共和国
IBTC 無収水研修能力強化プロジェクト

業務完了報告書
（サポーティングレポート VOL.1/2）

2021 年 6 月

独立行政法人
国際協力機構（JICA）

八千代エンジニヤリング株式会社
横浜ウォーター株式会社

環境
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添付資料

【添付資料】

添付資料 1：	合同調整委員会（JCC）会合の合意文書 ※プロジェクト・モニタリング・シートを含む
添付資料 2：	ベースライン調査報告書
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添付資料 10：	講師技術会合の資料
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添付資料１

合同調整委員会（JCC）会合の合意文書

※プロジェクト・モニタリング・シートを含む

MINUTES OF MEETING ON

THE KICK-OFF MEETING

17th August 2017

MINUTES OF MEETING
BETWEEN
JAPAN INTERNATIONAL COOPERATION AGENCY
AND
DEPARTMENT OF WATER AND SANITATION
REPUBLIC OF SOUTH AFRICA
ON
THE JAPANESE TECHNICAL COOPERATION
FOR
PROJECT FOR STRENGTHENING THE TRAINING CAPACITY
OF IBTC ON NON-REVENUE WATER

Based on the Record of Discussion signed on 21st April 2017(hereinafter referred to as "the R/D"), the mission of Japan International Cooperation Agency (hereinafter referred to as "JICA") visited Republic of South Africa (hereinafter referred to as "South Africa") to officially commence Project for Strengthening the Training Capacity of IBTC on Non-Revenue Water Project (hereinafter referred to as "the Project") with the JICA Expert Team who will cooperate with Infrastructure Branch Training Centre (hereinafter referred to as "IBTC") under National Water Resources Infrastructure Branch (hereinafter referred to as "NWRIB") of Department of Water and Sanitation (hereinafter referred to as "DWS") and also South Africa Local Government Association (hereinafter referred to as "SALGA") for implementation of the Project, and had a series of discussions with them.

As a result of discussions, both parties confirmed the matters referred to in the document attached hereto.

Pretoria, 17th August 2017

Mr. Akinori MIYOSHI
Chief Advisor,
Japan International Cooperation Agency
(JICA) Expert Team

Ms. Nchedi Moripe
Chief Director, Global Cooperation
Department of Water and Sanitation
Republic of South Africa

Mr. Tomohiro Seki
Chief Representative,
JICA South Africa Office

Mr. Willam Moraka
Director, Water Sustainability &
Innovation
South Africa Local Government
Association,
Republic of South Africa

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ATTACHED DOCUMENT

1. Outline of the Project Implementation

The South African side understood and agreed to the outline of the Project implementation including basic principles as attached. The South African side suggested to move the schedule of Activity 3-13 "Conduct trainings by South African Facilitators for NRW Skills Programme at IBTC." forward to meet the needs of skills development earlier, and then both parties confirmed that the schedule will be revised according to progress of other activities, particularly development of NRW Skills Programme as an accredited programme.

Both parties also agreed that the Work Plan will be finalized through discussions between DWS and the JICA Experts, and approved by the first Joint Coordinating Committee (hereinafter referred to as "the 1st JCC") to be held before the end the year 2017.

2. Monitoring Sheet

Both parties agreed that the Monitoring Sheet shall be used to regularly and jointly monitor the Project. As a result of discussions, both parties prepared and agreed on Monitoring Sheet (Version. 0) as attached, which shows revision of Project Design Matrix (hereinafter referred to as "PDM") and accordingly revision of Plan of Operation (hereinafter referred to as "PO"). Details of revision are as follows:

Before Revision (PDM_0)	After Revision (PDM_1)
Activities for Output 3	
3-4. Select candidate facilitators (qualified/skilled artisans on water reticulation or equivalent) for NRW Skills Programme from Municipalities and IBTC (DWS).	3-4. Select facilitators (qualified/skilled artisans on water reticulation or equivalent) for NRW Skills Programme from Municipalities and IBTC (DWS).
3-5. Schedule Training of Trainer (facilitator) (TOT) for NRW Skills Programme at IBTC.	3-5. Schedule Training of Trainer (facilitator) (TOT), Assessors and Moderators for NRW Skills Programme at IBTC.
Input (The South African Side)	
1. Project Personnel 1) JCC Chairperson: Chief Director of Global Cooperation, DWS 2) Project Director (PD): Director of NWRI, DWS 3) Project Manager (PM): Center Manager of IBTC 4) Counterparts (C/P) for technical transfer - IBTC personnel (e.g. Training Manager), Facilitators selected 5) Quality Assurer 6) Coordination/Municipality Advisor: SALGA	1) JCC Chairperson: Chief Director of Global Cooperation, DWS 2) Project Director (PD): Director of NWRI, DWS 3) Co-Project Director (PD): SALGA 4) Project Manager (PM): Center Manager, IBTC 5) Training Manager, IBTC 6) Quality Assurer, IBTC 7) NRW Training Personnel, IBTC 8) Municipal Coordinator (Technical), SALGA 9) Municipal Coordinator (HRD), SALGA

7) Technical Cooperators: Universities, TVET colleges, etc. 8) Members of Technical Working Group 9) Other project personnel mutually agreed upon as necessary	10) TOT Facilitator 11) Candidate Facilitator 12) Other project personnel mutually agreed upon as necessary
Input (The Japanese Side)	
1. JICA Experts 1) Chief Advisor / NRW Management 2) Skills Programme Planning 3) Water Leak Detection 4) Hydraulic Analysis / Pressure Control 5) Training Yard Design and Supervision 6) Procurement / Administrative Coordination 7) Other Expert(s) if necessary	1. JICA Experts 1) Chief Advisor / NRW Management 2) Deputy Chief Advisor / NRW Management 3) Skills Programme Planning / Organization Coordination 4) Water Leakage Detection 5) Water Distribution Control / Commercial Loss 6) Training Yard Design and Supervision 7) Procurement / Administrative Coordination 8) Training Management / Human Resource Development 9) Other Expert(s) if necessary
2. Facilities 1) Training yard 2) Other facilities mutually agreed upon as necessary	2. Facilities 1) Training yard 2) Web Site Development and Maintenance 3) Other facilities mutually agreed upon as necessary

3. JCC Members

As a result of discussions, both parties confirmed JCC members as attached based on the list attached on the R/D.

4. Project Members

As a result of discussions, the project members were nominated as attached and will be approved at the 1st JCC meeting. The responsible members for each activity were selected tentatively from both parties as shown in the Monitoring Sheet, and these will be revised through the project activities such as baseline survey.

5. Inputs

Both parties confirmed execution of inputs described in the R/D as well as PDM.

6. Non-Revenue Water Training Personnel

In addition to inputs by the South African side described in the R/D as well as Project Design Matrix and as a result of discussions, the South African side agreed that IBTC will provide dedicated personnel, which is technically in charge of project implementation at the working level together with JICA Experts by the end of year 2017.

7. Office Space and Facilities

Both parties confirmed that the office space and necessary facilities for JICA Experts at IBTC were prepared properly.

8. Trainings in Japan

As a result of discussions, both parties confirmed and agreed on the concept, tentative syllabus, schedule and timing of trainings in Japan as attached. However, these will be reviewed as a result of activities.

The South African side requested to include aspect of training quality assurance in Japan, then the Japanese side accepted it.

(End of document)

Appendix 1: Outline of the Project Implementation
Appendix 2: Monitoring Sheet (Version. 0)
Appendix 3: List of JCC Members
Appendix 4: List of Project Members (South African Side)
Appendix 5: Trainings in Japan (Tentative)

Appendix 1

water & sanitation
Department: Water and Sanitation
REPUBLIC OF SOUTH AFRICA

SALGA
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Japan International Cooperation Agency
JICA

Project for Strengthening the Training Capacity of IBTC on Non-Revenue Water in South Africa

Outline of the Project Implementation

Kick-Off Meeting
17th August 2017

Project Team

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1. Project Outline and Timeline P3
2. Current Situation and Issues surrounding IBTC P4
3. Current Situation and Issues in Water Supply Services P5
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5. HRD and Skill Development in Water Supply Sector P9
6. Project Positioning and Basic Principles P10
7. T-1: Management/Business Standpoint and Resources for Sustainability P11
8. T-2: Interactive Win-Win Partnership P12
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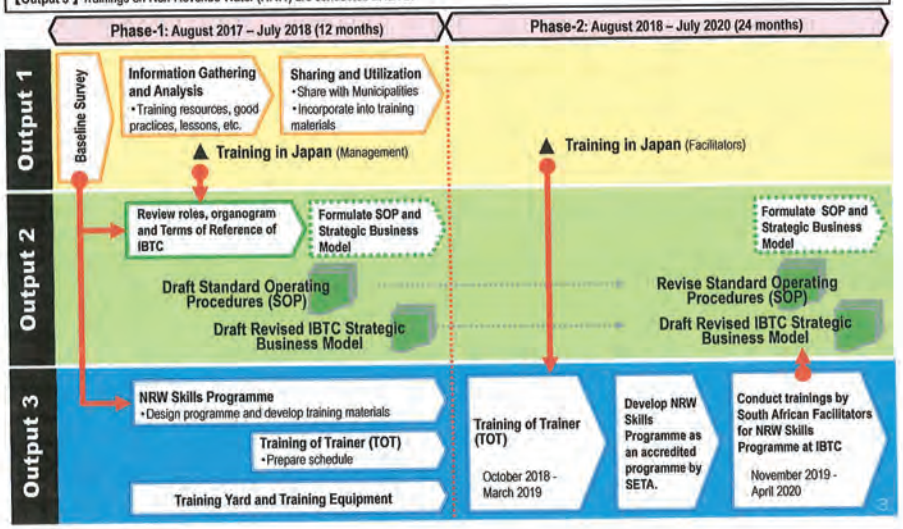
1. Project Outline and Timeline

【Overall Goal】 Non-Revenue Water (NRW) skills development for Municipalities are continuously conducted under the IBTC's direction in collaboration with SALGA.
【Project Purpose】 NRW Skills Programme is continuously provided at IBTC, based on organizational and technical needs.
【Output 1 】 Training information on water supply sector is accumulated at IBTC and shared with SALGA and Municipalities.
【Output 2 】 IBTC's training management capacity in water supply sector is improved.
【Output 3 】 Trainings on Non-Revenue Water (NRW) are conducted at IBTC.

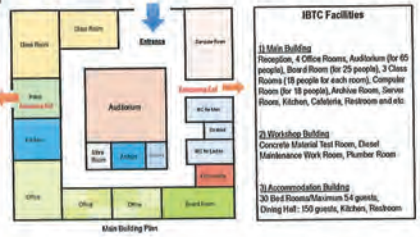


2. Current Situation and Issues surrounding IBTC

Roles to be added for IBTC

- "**An anchor, a hub, coordinating function**" of skill development in water supply sector
- "**An accredited training provider**"and "**a trade tester**" for the needs of water supply sector.
- Programme, provision and skill development through "**practical trainings**"

Regular/seconded staff: 10
Occupied (incl. doubling another post): 19
Past performance: **Difference between plan and actual achievement** (limited to un accredited trainings on appurtenant work for water infrastructure, basic occupational safety and health, and computer skill for DWS's junior workers)



3. Current Situation and Issues in Water Supply Services

Population in South Africa (2015)
Total : 53.5 Million
Urban Area: 34.7 Million (64.8%)
Rural Area: 18.8 Million (35.2%)

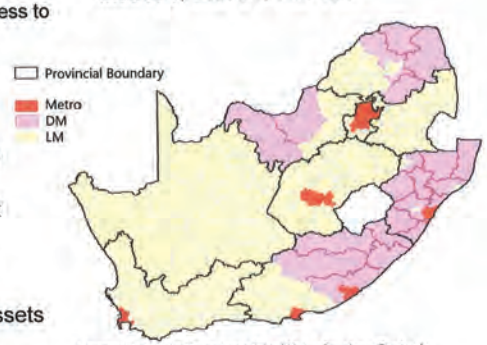
Water Supply Coverage (2015)
Urban Area: 92% (Incl. Yard Tap)
Rural Area: 38% (81% including access to improved water source)

Vulnerability of Overall WSAs
- ☐ Financial Asset Management
- ☐ Revenue Collection
- ☐ Wastewater/Environmental Safety and Regulatory Compliance
- ☐ Infrastructure Asset Management
- ☑ Staff Skill Levels (Technical)
- ☐ Technical Staff Capacity (Nos.)
- ☐ Financial Management
- ☑ Operation and Maintenance of Assets

Source: Municipal Strategic Self-Assessment of South Africa, 2014/2015, DWS

Municipalities: 257
- Metro. Municipality/Metro: 8
- District Municipality/DM: 44
- Local Municipality/LM: 205

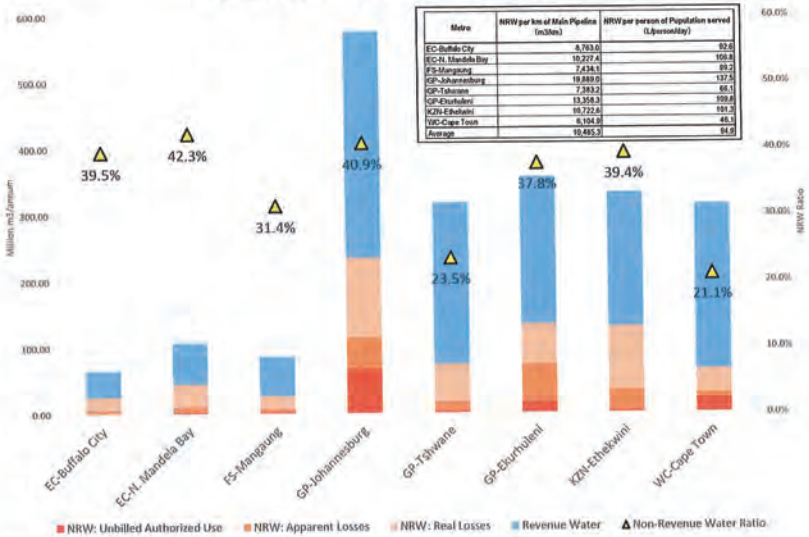
Water Supply Authority (WSA): 152
Metro: 8, DM: 21, LM: 123



Source: Strategic Overview of the Water Services Sector in South Africa, 2015, DWS

4. Current Situation of Non-Revenue Water

Water Balance of WSAs in Metros

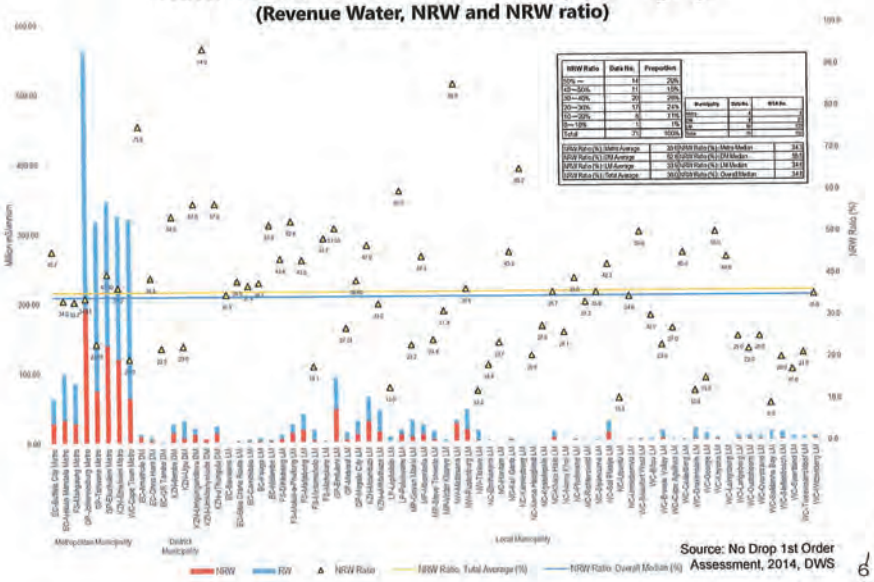


Metro	NRW per km of Main Pipeline (m3/km)	NRW per person of Population served (L/person/day)
EC-Buffalo City	8,703.0	92.6
EC-N. Mandela Bay	10,227.4	108.8
FS-Mangaung	7,434.1	89.2
GP-Johannesburg	19,880.0	137.5
GP-Tshwane	7,363.2	65.1
GP-Ekurhuleni	13,358.3	100.8
KZN-Ethekwini	10,722.6	101.3
WC-Cape Town	6,104.9	46.1
Average	10,485.3	84.0

Source: Metropolitan Municipality Water Balance Assessment, 2015, DWS

4. Current Situation of Non-Revenue Water

Water Balance of WSAs and Municipal Category
(Revenue Water, NRW and NRW ratio)



NRW Ratio	Data No.	Proportion
50% ~	14	20%
40~50%	11	15%
30~40%	20	28%
20~30%	17	24%
10~20%	8	11%
0~10%	1	1%
Total	71	100%

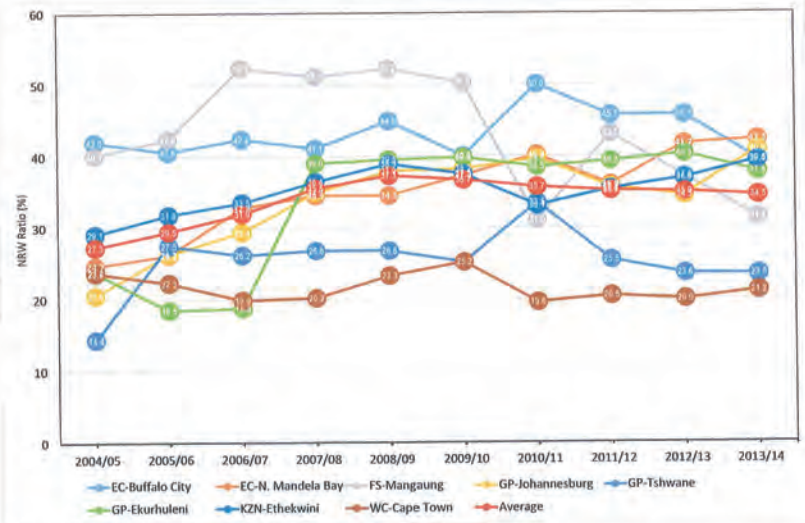
Municipality	Data No.	40 Data
Metro	8	0
DM	21	4
LM	123	36
Total	152	40

2010 NRW Ratio (%) Metro Average	34.3
2010 NRW Ratio (%) DM Average	38.8
2010 NRW Ratio (%) LM Average	34.9
2010 NRW Ratio (%) Total Average	34.8
2010 NRW Ratio (%) Metro Median	34.3
2010 NRW Ratio (%) DM Median	38.8
2010 NRW Ratio (%) LM Median	34.9
2010 NRW Ratio (%) Overall Median	34.8

Source: No Drop 1st Order Assessment, 2014, DWS

4. Current Situation of Non-Revenue Water

Changes in NRW Ratio of Metros



Source: Metropolitan Municipality Water Balance Assessment, 2015, DWS

5. HRD and Skill Development in Water Supply Sector

National Plan & Strategy

■National Development Plan (NDP)
- Improve the system of skills planning and shaping production of skills
- Develop a set of strong qualifications and support for no-formal programmes
- Generate 30,000 artisans per year by 2030

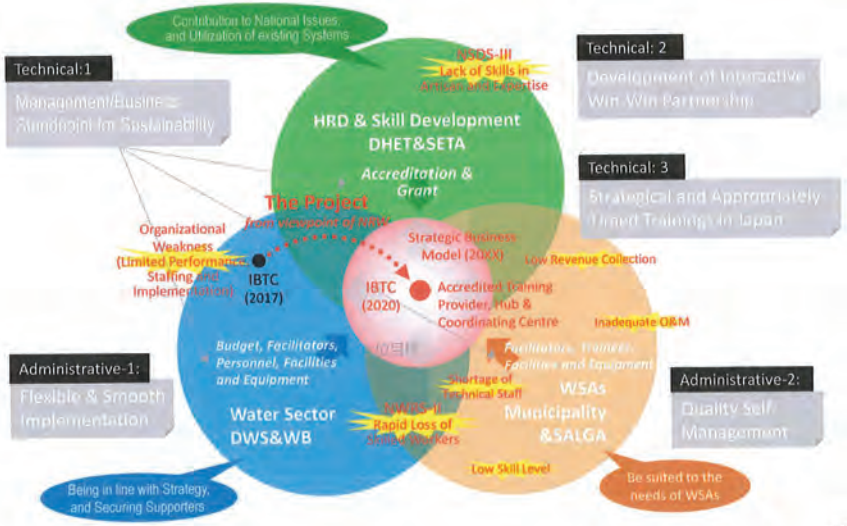
■DWS / National Water Resources Strategy II (NWRS-II)
- "Rapid loss of skilled workers" as a problem of HRD and skill development in water sector

■DHET / National Skills Development Strategy III (NSDS-III)
- "Lack of skills in artisan and expertise" as a problem of HRD and skill development regardless of sector

HRD and Skill Development in WSAs

Major Metro WSAs	: Capable of providing own training or outsourcing to private training providers for skill development
Most of WSAs	: Insufficient personnel, skill level and budget allocation ⇒Challenges in HRD and Skill Development NRW: Outsource to private companies if available

6. Project Positioning and Basic Principles



Technical Assistance Model (which DWS has expected)

7. Technical Basic Principle-1: Management/Business Standpoint and Resources for Sustainability

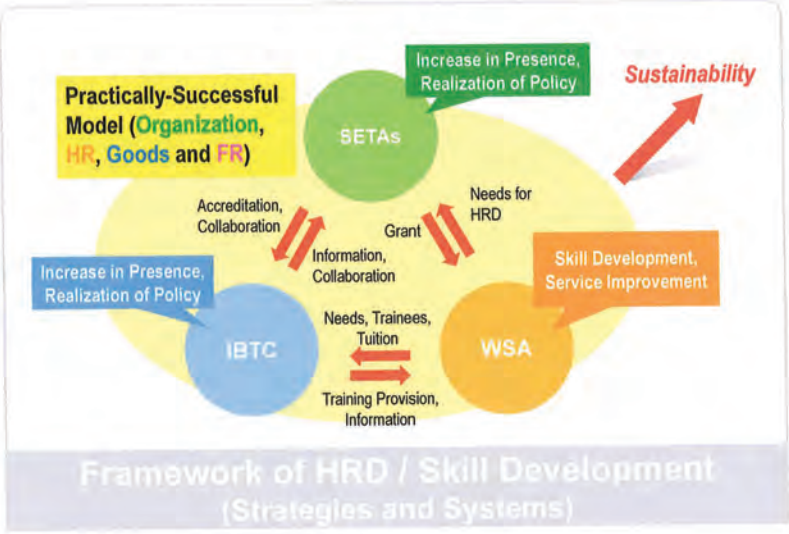
Management/Business Standpoint ≒ Ownership

Resources and Requirements for Sustainability

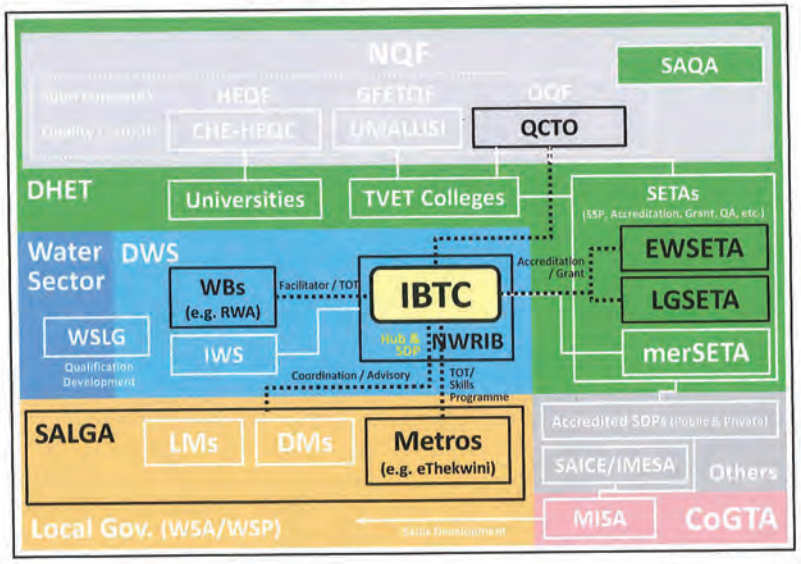
Organization	Human Re. (HR)	Goods	Finacial Re. (FR)
Structure, Strategic Model, SOP, etc.	Personnel, Internal/ External Facilitators Trainees from WSAs, etc	Accredited Programme, Training Facilities, Equipment, Materials, etc.	O&M Cost, Grants, Funds, Course Tuition, etc.

- Strengthening of organizational structure and personnel for training management and provision (Organization & HR)
- Attracting trainees through active approaches (Organization & HR)
- Ensuring motivation by successful experience (Organization & HR)
- Collaboration for training provision with other Organizations concerned (HR & Goods)
- Service provision (attractive training) based on customer's/WSA's needs (HR & Goods)
- Improvement in management, provision and their quality through PDCA (Organization & HR & Goods)
- An accredited programme aiming at obtaining skill development grant (Goods& FR)
- Constant budget appropriation for training management and provision (FR)
- Promotion of establishing training supported by grants and funds (FR)

8. Technical-2: Development of Interactive Win-Win Partnership

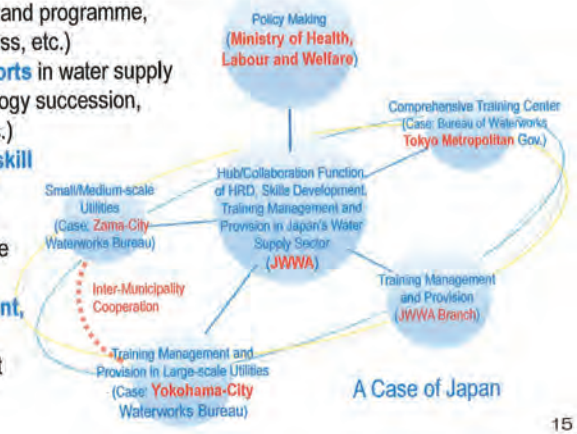


Relationship between IBTC and Partners, and Key Partners in the Project



Technical Basic Principle-3: Strategical and Appropriately-Timed Trainings in Japan

- **Framework of HRD and skills development** in water supply sector of Japan
- **Training management and provision** from the viewpoint of **resources** (role of each organization, organizational structure, facilitators, training management, inter-municipality cooperation, needs analysis and incorporating into curriculum and programme, fund, grant and budget process, etc.)
- **Issues, challenges and efforts** in water supply services (staff aging, technology succession, knowledge management, etc.)
- Getting **ideas** for **HRD and skill development** of WSAs and **vision of IBTC**
- **Benchmarking** (comparative evaluation)
- Training **facilities, equipment, materials** for waterworks including NRW management



Administrative Basic Principle-1: Flexible and Smooth Project Implementation

Smooth and close communication [illegible]

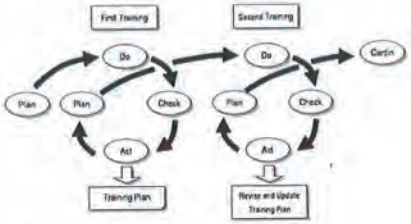
- [illegible] problems [illegible] early [illegible]
- [illegible] monitor [illegible] relevance, effectiveness, efficiency, impact, sustainability

Approaches which contribute to flexible and smooth implementation

- **Well-arranged JCC meetings** and **regular meetings** to be successful
- **Appropriate assignment** of project members and JICA Experts
- Execution of **roles and responsibilities**, particularly budget allocation and timely appropriation, personnel assignment, accompanying with JICA Experts for survey and interview, tax exemption for equipment from Japan, and so on.
- Scheduled **procurement** of equipment (specification, tendering, tax exemption, customs clearance and delivery)
- Scheduled **training yard construction** (designing, tender, construction, supervision and completion)

Administrative Basic Principle-2: Quality Self-Management in Project Implementation

- Records of communication and activities, manuals, reports and documents
- **Project Monitoring Sheets**
  An effective tool of monitoring as well as self-quality management (prepared jointly by all Project Members with ownership)
- **Plan-Do-Check-Action (PDCA) Cycle**
  Feedback of knowledge and lessons in the implementing process to achieve substantial results



Quality Assurance of the Project

Thank you very much for your attention!

water & sanitation
Department: Water and Sanitation REPUBLIC OF SOUTH AFRICA

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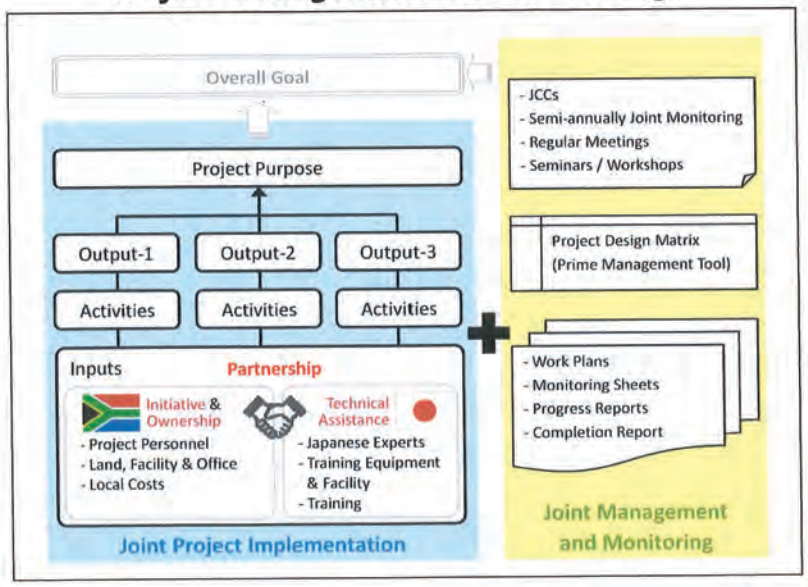
Project for Strengthening the Training Capacity of IBTC on Non-Revenue Water in South Africa

Outline of the Project Implementation (Supplementary)

Kick-Off Meeting
17th August 2017

Project Team

Project Management and Monitoring



Inputs from the South African side

Description in R/D

In addition to project personnel,

(a) Suitable office space with necessary equipment;
(b) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the equipment provided by JICA;
(c) Means of transport and travel allowances for the JICA experts for official travel within South Africa;
(d) Information as well as support in obtaining medical service;
(e) Credentials or identification cards;
(f) Available data (including maps and photographs) and information related to the Project;
(g) Running expenses necessary for the implementation of the Project;
(h) Expenses necessary for transportation within South Africa of the equipment as well as for the installation, operation and maintenance thereof;
(i) Necessary facilities to the JICA experts for the remittance as well as utilization of the funds introduced into South Africa from Japan in connection with the implementation of the Project; and
(j) Cost for asset management, operation and maintenance for equipment.

Description in PDM

1. Project Personnel

1) JCC Chairperson - Chief Director of Global Cooperation, DWS
2) Project Director (PD) - Director of NWRI, DWS
3) Project Manager (PM) - Manager of IBTC

Inputs from the South African side

1. Project Personnel (continued)

4) Counterparts for technical transfer - IBTC personnel (e.g. Training Manager), Facilitators selected
5) Quality Assurer
6) Coordination/Municipality Advisor - SALGA
7) Technical Cooperators - Universities, TVET colleges, etc.
8) Members of Technical Working Group
9) Other project personnel mutually agreed upon as necessary

2. Land, Building and Facilities

1) Office space and facilities for JICA Experts, including water, electricity, internet connection and air conditioners if necessary
2) Land for training yard
3) Other facilities mutually agreed upon as necessary

3. Local Cost

1) Allowance, accommodation, travelling cost and foods for project personnel, facilitators and trainees in South Africa (born by DWS, Municipalities, etc.)
2) Administration and operational costs including cost for demurrage at local customs point and licensing of equipment/instruments if necessary
3) Other costs mutually agreed upon as necessary

Point which was confirmed addtionally

Tax exemption and custom clearance if equipment are procured/imported from Japan

JCC Members

R/D

Position in the Project	Title
Chairperson	Chief Director, Global Cooperation
South African Side	
Project Director	Director, NWRIB, DWS
Project Manager	Center Manager, IBTC, DWS
Member	Training Manager, IBTC, DWS
Member	Quality Assurer, IBTC, DWS
Member	ODA, International Water Support, DWS
Municipal Coordinator (Technical)	Water Services Branch, SALGA
Japanese Side	
JICA Experts	
JICA SA Office	Chief Representative
JICA HQs	
Observers	
Embassy of Japan	Representative

After Review

Position in the Project	Title
Chairperson	Chief Director, Global Cooperation, DWS
Alternate	Director, ODA, DWS
South African Side	
Project Director	Director, NWRIB, DWS
Co-Project Director	SALGA
Project Manager	Center Manager, IBTC, DWS
Member	Training Manager, IBTC, DWS
Member	Quality Assurer, IBTC, DWS
Member	ODA, International Water Support, DWS
Municipal Coordinator (Technical)	Director, Water Sustain. & Innovation, SALGA
Japanese Side	
JICA Experts	CA and other experts
JICA SA Office	Chief Representative
JICA HQs	Mission Team
Observers	
Embassy of Japan	Representative
Dep't of Int'l Rel. Co.	Representative
Municipalities / WBs	Representatives
EWSETA	Representative
LGSETA	Representative

Project Members (South African Side)

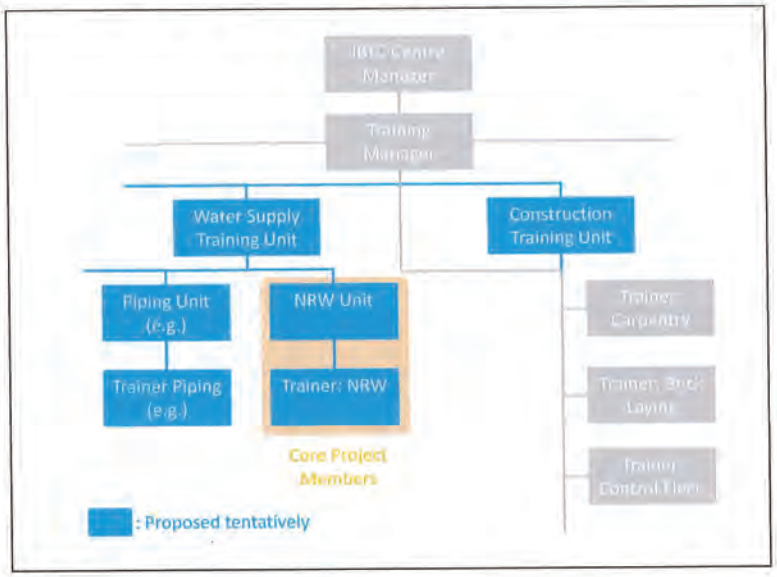
R/D

Position in the Project	Title
Project Director	Director, NWRIB, DWS
Project Manager	Center Manager, IBTC, DWS
Member	Training Manager, IBTC, DWS
Member	Quality Assurer, IBTC, DWS
-	-
Municipal Coordinator (Technical)	Water Services Branch, SALGA
-	-
Members	TOT Facilitator from DWS
Members	Candidate Facilitator from Municipalities

After Review

Position in the Project	Title
Project Director	Director, NWRIB, DWS
Co-Project Director	SALGA
Project Manager	Center Manager, IBTC, DWS
Member	Training Manager, IBTC, DWS
Member	Quality Assurer, IBTC, DWS
Members	NRW Training Personnel, IBTC, DWS
Municipal Coordinator (Technical)	Director, Water Sustain. & Innovation, SALGA
Municipal Coordinator (HRD)	SALGA and/or Municipal Institute of Learning (eThekweni)
Members	TOT Facilitator
Members	Candidate Facilitator

IBTC Organogram (Proposed)



JICA Experts

R/D	Actual
Position	**Position**
Chief Advisor / NRW Management	Mr. Akinori MIYOSHI Chief Advisor / NRW Management
-	Mr. Taketoshi FUJIYAMA Deputy Chief Advisor / NRW Management
Skills Programme Planning	Mr. Kenichiro SUGIYA Skills Programme Planning / Organization Coordination
Water Leak Detection	Mr. Hiroki NIIMURA Water Leakage Detection
Hydraulic Analysis / Pressure Control	Mr. Hiroyuki MORITA Water Distribution Control / Commercial Loss
Training Yard Design and Supervision	Mr. Masuji IDE Training Yard Design and Supervision
Procurement / Administrative Coordination	Ms. Mariko KOBAYASHI Procurement / Administrative Coordination
-	Mr. Nobutaka MARUYAMA Training Management / Human Resource Development
-	Mr. Masuji IDE Training Coordination in Japan (Works in Japan)

Inputs from the Japanese side

Description in R/D

(a) Dispatch of JICA Experts
(b) Training
(c) Machinery and Equipment

Description in PDM

1. JICA Experts

1) Chief Advisor / NRW Management
2) Skills Programme Planning
3) Water Leak Detection
4) Hydraulic Analysis / Pressure Control
5) Training Yard Design and Supervision
6) Procurement / Administrative Coordination, and 7) Other Expert(s) if necessary

2. Facilities

1) Training yard, and 2) Other facilities mutually agreed upon as necessary

3. Equipment, instruments, tools and materials

1) Portable ultrasonic water flow meter
2) Leak detection equipment/instruments
3) Tools for training
4) Materials such as pipe, fittings, valve, meter and etc. and
5) Other equipment, instruments, tools and materials mutually agreed upon as necessary

4. Training

1) Training in Japan, and 2) Training in the third country if necessary

Facilities and Equipment (Tentative)

Facilities

No.	Item	Quantity
1	Training Yard Construction (20x40m)	1
2	Web Site Development and Maintenance	1

Equipment

No.	Item	Quantity
1	Portable ultrasonic flow meter	3
2	Water pressure data logger 2ch	3
3	Water leak detector (leak noise correlator)	2
4	Water leak detector (Ground-microphone)	3
5	Non-metal pipe locator	3
6	Metal locator	3
7	Time integral water leak detector	3
8	Acoustic rod (1.5m)	7
9	Distance meter	3
10	Hammer drill (200V)	3
11	Boring bar 1.0m	3
12	Drill bit ϕ19x800mm	10
13	Reference meter (electronic type)	3
14	Generator (200V for Hammer Drill, 2.5kVA)	2

Training Yard and Equipment (Sample)

Trainings in Japan

1st Training in the Phase-1: 2-weeks Training in tentatively February 2018

To strengthen training management for project members at the management level in line with Activity 2-1 "Review roles and responsibility of IBTC for skills development of Municipalities in water supply sector based on the results of Output-1.".

- Policies on skill development and succession (Ministry of Health, Labour and Welfare: MHLW)
- Training system for skill development and succession, information provision / sharing, needs analysis, practical implementation (Japan Water Works Association: JWWA)
- Training programme, TOT, procedures of lecture, utilization of training facilities/yards (JWWA Branch)
- Water supply services and system of large-scale municipality (Yokohama Waterworks Bureau: YWWB)
- Skill development, HRD and training system of YWWB
- Practical experience at training facility/yard (reticulation, service pipes and leakage detection) of YWWB
- Water supply services, skill development, HRD, inter-municipal cooperation of small/medium-scale municipality (Zama City)
- Training management and improvement through PDCA
- Water leakage survey plan

Trainings in Japan

2nd Training in the Phase-2: 2-weeks Training in tentatively February 2019

To strengthen technical and management skills for NRW for project members including the candidate facilitators selected in TOT in line with Activity 3-9 "Conduct TOT by both JICA Experts and South African Facilitators for NRW Skills Programme at IBTC.".

- Training programme, TOT, procedures of lecture, utilization of training facilities/yards (JWWA Branch)
- Water supply services and system of large-scale municipality (YWWB)
- Practical experience at training facility/yard (reticulation, service pipes and leakage detection) of YWWB
- Comprehensive training facility/yard (Bureau of Waterworks Tokyo Metropolitan Gov.)
- Water supply plan and pipe replacement plan
- Water balance, NRW components and NRW reduction measures
- Water leakage survey plan
- Water meter laboratory, error test and test equipment
- Meter reading
- Mapping system and network drawings
- Construction works, supervision and site visit
- Water pressure control and District-Metered Area (DMA)

Baseline Survey (Sep. - Dec. 2017)

	No.	Survey Method
Metro	8	Basically, JICA Experts and SA staff conduct field surveys, with DWS/IBTC or SALGA.
DM/LM	146 (DM:21, LM: 125)	1) 20% of both DM and LM (approx. 30 Municipalities): a. 10 Municipalities out of 30 are surveyed by JICA experts and SA staff. b. Other 20 Municipalities are surveyed by SA staff.
		2) 80% of both (approx. 116): Through SALGA, send a questionnaire to all and conduct surveys.

Training Information
1 Outline of training plan: organizer, purpose of training, budget, system to accommodate, whether or not accreditation from SETAs, etc.
2 Contents of training course: field, subject, no. of people, skill level, schedule, cost, participation fee, etc.
3 Status of attendance: attendance rate, completion rate, completion condition, etc.
4 Trainer: field, no. of people, working rate, confirmation of dedicated position or not, etc.
5 Training facility and equipment possessed: capacity, usage, model number, working rate, installation year, others
6 Training needs: links with necessary reasons and problems, requests from the site, etc.
7 Good practices and lessons on training management: factors of success, impacts of training, etc.
Current Situation of WSA/WSP
1 Organizational structure: no. of staff, organizational structure, whether or not training section and presence of person in charge, etc.
2 Financial status: financial statements of the past five years, water tariff system and collection rate, cost recovery situation, etc.
3 Business situation: population served, no. of connected customers, water source and water service situation, NRW ratio, etc.
4 Existing facilities: details of water treatment facilities and piping networks, situation of O&M, owned equipment, leakage rate, etc.
5 Technical Level: no. of engineers, no. of holders of Unit Standard, achievement of O&M, etc.
6 Ability to formulate policies and plans related to training: no. of policies and plans formulated, presence or absence of special departments and persons in charge, etc.
* For IBTC, surveys are conducted in the items above which are applicable to IBTC.
Training related Systems and Laws & Regulations
1 Funding system: SETA Grant Regulation, National Skills Fund: NSF, municipal subsidy system and scholarship, etc.
2 Qualification and facility certification system: processes and conditions, cost, and difficulty for certification, etc.
3 Evaluation system related to training: relationship between training/qualification and salary increase/grade, evaluation method, etc.

To Chief Representative of JICA South Africa Office

PROJECT MONITORING SHEETS

Project Title : Project for Strengthening the Training Capacity of IBTC on Non-Revenue Water

Version of the Sheet: Ver. 0 (Term: -)

Name: Akinori Miyoshi
Title: Chief Advisor
Submission Date: 17 August 2017

I. Summary

1 Progress
1-1 Progress of Inputs
1-2 Progress of Activities
1-3 Achievement of Output
1-4 Achievement of the Project Purpose
1-5 Changes of Risks and Actions for Mitigation
1-6 Progress of Actions undertaken by the Japanese side
1-7 Progress of Actions undertaken by the South African side
1-8 Other remarkable/considerable issues related/affect to the project (such as other JICA's projects, activities of counterparts, other donors, private sectors, NGOs etc.)

2 Delay of Work Schedule and/or Problems (if any)
2-1 Detail
2-2 Cause
2-3 Action to be taken
2-4 Roles of Responsible Persons/Organization

3 Modification of the Project Implementation Plan
3-1 PO
3-2 Other modifications on detailed implementation plan
(Remarks: The amendment of R/D and PDM (title of the project, duration, project site(s), target group(s), implementation structure, overall goal, project purpose, outputs, activities, and input) should be authorized by JICA HQ. If the project team deems it necessary to modify any part of R/D and PDM, the team may propose the draft.)

4 Preparation by the South African side toward after completion of the Project

II. Project Monitoring Sheet I & II (as attached)

Project Monitoring Sheet I (Revision of Project Design Matrix)

Version 1
Dated 17 Aug. 2017

Project Title: Project for Strengthening the Training Capacity of IBTC on Non-Revenue Water
Project Period: August 2017 to July 2020 (36 months)
Implementing Organization: Department of Water and Sanitation (DWS) / IBTC
Dicrect Beneficiaries: DWS, IBTC and its personnel, Facilitators selected
Indicrect Beneficiaries: Municipalities
End Beneficiaries: Customers / Consumers of water supplied by Municipalities
Project Site: Gauteng Province

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
<Overall Goal> Non-Revenue Water (NRW) skills development for Municipalities are continuously conducted under the IBTC's direction in collaboration with SALGA.	1. Actual trainings in IBTC (No. of trainings / trades or skills) 2. IBTC organization/individual performance (degree/status) 3. Programmes planned in Strategic Business Model (trades or skills) 4. Actual trainings of NRW in Municipalities (No. of training)	1&4. Annual Training Report 2. Capacity Assessment Report 3. IBTC Strategic Business Model			
<Project Purpose> NRW Skills Programme is continuously provided at IBTC, based on organizational and technical needs.	1. Actual trainings (No. of trainings / trades or skills) 2. IBTC organization/individual performance / capacity 3. Programmes planned in Strategic Business Model (trades or skills) 4. Status of accreditation of NRW Unit Standards applied to SETA	1. Annual Training Report 2. Capacity Assessment Report 3. IBTC Strategic Business Model 4. SETA Accreditation Certificate	- Dramatic reduction of budget and public grants on skills development for Municipalities does not happen.		
<Outputs> 1. Training information on water supply sector is accumulated at IBTC and shared with SALGA and Municipalities.	1-1. List of training resources (by providers, programmes, human resources, manuals, subsidies/grants, etc.) 1-2. Benchmarked matrix (summary) of Japan and South Africa on water services (comparative features, strength/weakness, methodology, etc.)	1-1. Baseline Survey Report 1-2. Benchmark Report			
2. IBTC's training management capacity in water supply sector is improved.	2-1. IBTC organization/individual performance / capacity 2-2. Progress of Organizational setting update 2-3. Record of SOPs (actual revisions) 2-4. Progress of update of IBTC Strategic Business Model	2-1. Capacity Assessment Report 2-2. Proposed Organogram of IBTC 2-3. Standard Operating Procedure (SOP) 2-4. Draft revised IBTC Strategic Business Model			
3. IBTC's training management capacity in water supply sector is improved.	3-1. Actual trainings on NRW Skills Programme (No. of trainings, trainees) 3-2. Appropriateness of NRW Skills Programme (trainees' evaluation) 3-3. Utilization of IBTC's skills training at sampled Municipality(ies)	3-1. IBTC Annual Report 3-2. Training evaluation questionnaire to trainees 3-3. Survey report in sampled Municipality(ies)			

Note:

Activities	Inputs		Important Assumption
Activities for Output 1 1-1. Conduct baseline survey on Skills Development in water supply sector (programme, human resources, materials and management). 1-2. Compile and analyze training resources, good practices, lessons learnt in water supply sector. 1-3. Share training resources, good practices, lessons learnt with SALGA and Municipalities. 1-4. Incorporate good practices into training materials. 1-5. Benchmark water supply services and its skills development in Japan. 1-6. Hold a seminar on the result of the baseline survey and benchmark.	**The South African Side** **1. Project Personnel** 1) JCC Chairperson: Chief Director of Global Cooperation, DWS 2) Project Director (PD): Director of NWRI, DWS 3) Co-Project Director (PD): SALGA 4) Project Manager (PM): Center Manager, IBTC 4) Training Manager, IBTC 6) Quality Assurer, IBTC 7) NRW Training Personnel, IBTC 8) Municipal Coordinator (Technical), SALGA 9) Municipal Coordinator (HRD), SALGA 10) TOT Facilitator 11) Candidate Facilitator 12) Other project personnel mutually agreed upon as necessary	**The Japanese Side** **1. JICA Experts** 1) Chief Advisor / NRW Management 2) Deputy Chief Advisor / NRW Management 3) Skills Programme Planning / Organization Coordination 4) Water Leakage Detection 5) Water Distribution Control / Commercial Loss 6) Training Yard Design and Supervision 7) Procurement / Administrative Coordination 8) Training Management / Human Resource Development 9) Other Expert(s) if necessary	**Pre-Conditions** - DWS and SALGA agree on their collaboration and cooperation for the Project - DWS allocates/ assigns personnel in charge of NRW Skills Programme at IBTC.
Activities for Output 2 2-1. Review roles and responsibility of IBTC for skills development of Municipalities in water supply sector based on the results of Output-1. 2-2. Draft proposed organogram of IBTC including NRW Training Section. 2-3. Prepare Terms of Reference for Training Sections related to skills development in water supply sector. 2-4. Prepare draft Standard Operating Procedures (SOP) of skills development provision. 2-5. Revise the SOP through the activities of Output-3. 2-6. Draft revised IBTC Strategic Business Model. 2-7. Conduct capacity assessment of IBTC's organization, individuals and facilitators developed.			
Activities for Output 3 3-1. Review situation/needs of skills development on NRW from the results of baseline survey of Activity 1-1. 3-2. Select registered Unit Standards related to NRW from existing qualifications of SAQA. 3-3. Design NRW Skills Programme consisting of the selected Unit Standards and supplementary items if any. 3-4. Select facilitators (qualified/skilled artisans on water reticulation or equivalent) for NRW Skills Programme from Municipalities and IBTC (DWS). 3-5. Schedule Training of Trainer (facilitator) (TOT), Assessors and Moderators for NRW Skills Programme at IBTC. 3-6. Develop training yard for NRW Skills Programme at IBTC. 3-7. Procure equipment, instruments/tools and materials for NRW Skills Programme at IBTC. 3-8. Develop training / learning materials for NRW Skills Programme at IBTC. 3-9. Conduct TOT by both JICA Experts and South African Facilitators for NRW Skills Programme at IBTC. 3-10. Develop NRW Skills Programme as an accredited programme by SETA. a) Apply for registration of facilitators of NRW Skills Programme as assessor/moderator/facilitator from SETA. b) Prepare Quality Management System of NRW Skills Programme at IBTC. c) Apply for accreditation of NRW Skills Programme to SETA. 3-11. Prepare Annual Plan of NRW Skills Programme including budget plan at IBTC. 3-12. Recruit participants from Municipalities through SALGA for NRW Skills Programme at IBTC. 3-13. Conduct trainings by South African Facilitators for NRW Skills Programme at IBTC. 3-14. Monitor implementation of NRW Skills Programme and feed the results back into Annual Plan and Programme. 3-15. Verify effects of NRW Skills Programme and provide necessary support by JICA Experts and IBTC in sampled Municipality(ies) if any.	**2. Land, Building and Facilities** 1) Office space and facilities for JICA Experts, including water, electricity, internet connection and air conditioners if necessary 2) Land for training yard 3) Other facilities mutually agreed upon as necessary **3. Local Cost** 1) Allowance, accommodation, travelling cost and foods for project personnel, facilitators and trainees in South Africa (born by DWS, Municipalities, etc.) 2. Administration and operational costs including cost for demurrage at local customs point and licensing of equipment/instruments if necessary 3. Other costs mutually agreed upon as necessary	**2. Facilities** 1) Training yard 2) Web Site Development and Maintenance 3) Other facilities mutually agreed upon as necessary **3. Equipment, instruments, tools and materials** 1) Portable ultrasonic water flow meter 2) Leak detection equipment/instruments 3) Tools for training 4) Materials such as pipe, fittings, valve, meter and etc. 5) Other equipment, instruments, tools and materials mutually agreed upon as necessary **4. Training** 1) Training in Japan 2) Training in the third country if necessary	**Issues & Countermeasures**

Note: Indicators will be discussed and finalized based on the baseline survey at the beginning of the Project and be agreed at Joint Coordinating Committee (JCC)

Project Monitoring Sheet II (Revision of Plan of Operation)

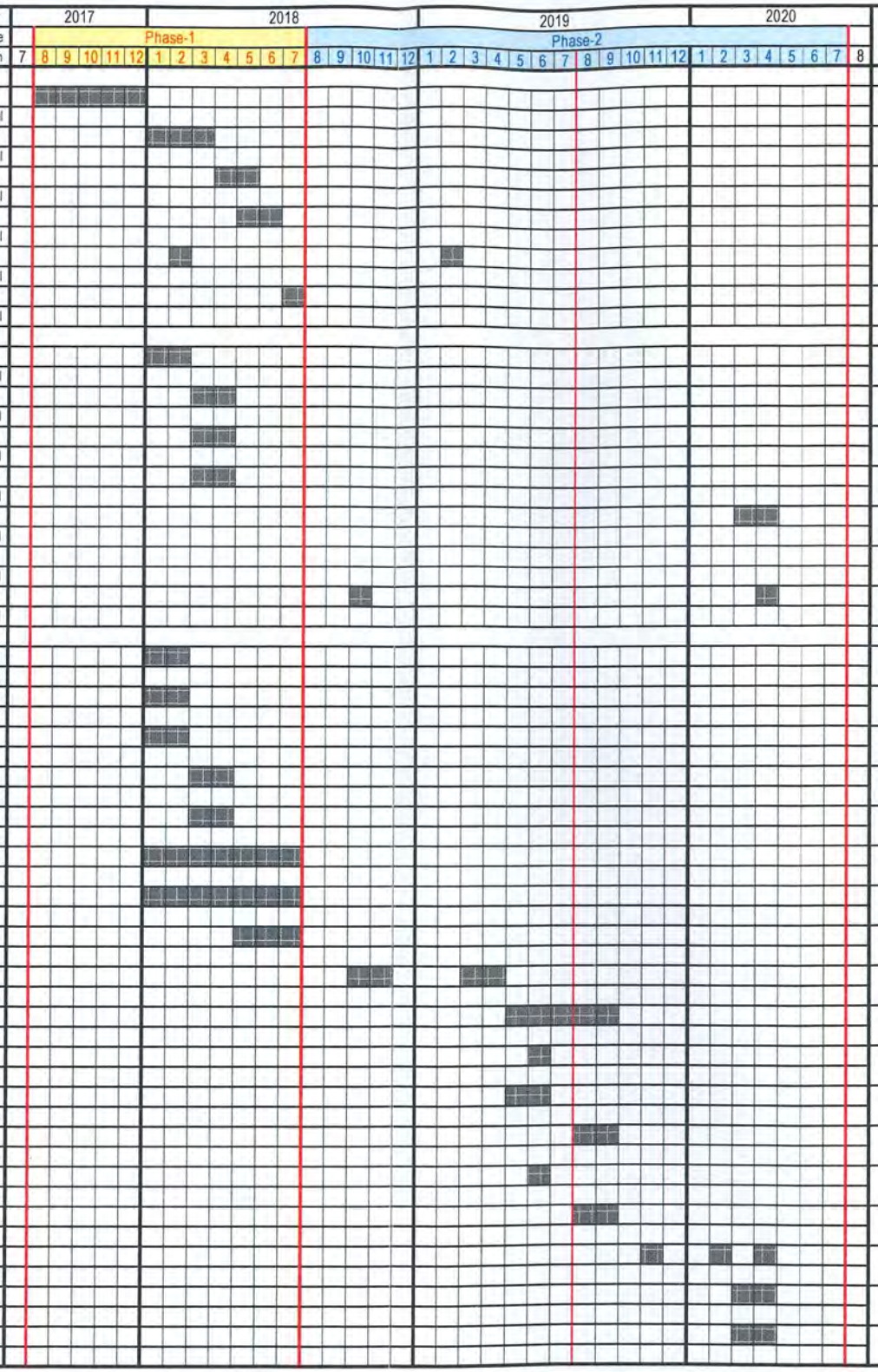
PO1

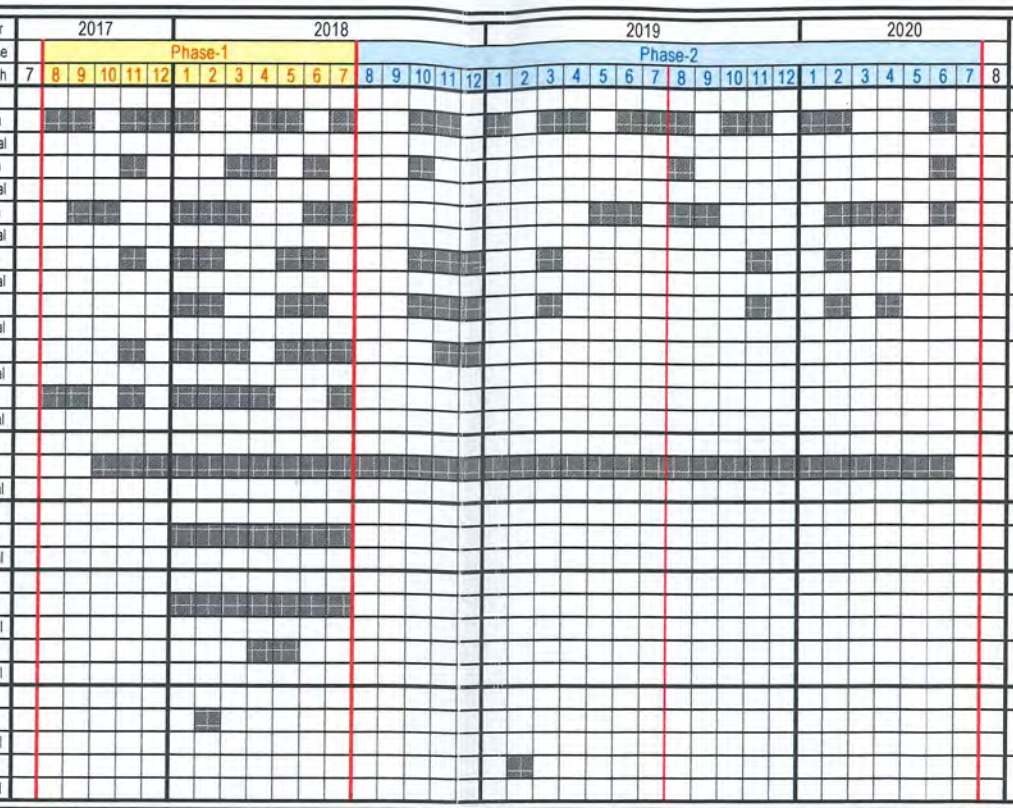
Version 1

Dated 17 Aug. 2017

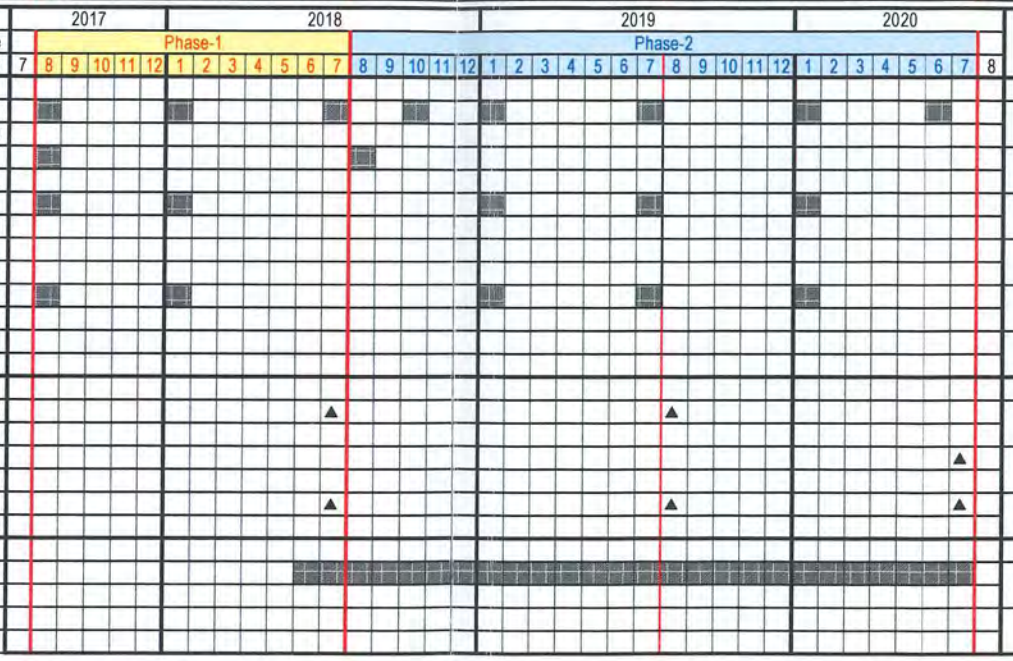
Project Title: Project for Strengthening the Training Capacity of IBTC on Non-Revenue Water

Activities	Expert in charge ①	②	③	④	⑤	⑥	⑦	Year / Phase / Month	Remarks	Monitoring: Achievement	Monitoring: Issues & Countermeasures	SA Members in charge: Responsible Organization	Responsible Person	Implementor	Relevant Partners
Output 1: Training information on water supply sector is accumulated at IBTC and shared with SALGA and Municipalities.															
1-1 Conduct baseline survey on Skills Development in water supply sector (programme, human resources, materials and management).	◎	◎				◎	○	Plan				NWRI, SALGA	IBTC(Rosa), SALGA (William)	IBTC, SALGA	WBs, WSAs, SETAs, WRC, TVET
								Actual							
1-2 Compile and analyze training resources, good practices, lessons learnt in water supply sector.	◎	◎					○	Plan				NWRI, SALGA	IBTC(Rosa), SALGA (William)	IBTC, SALGA	
								Actual							
1-3 Share training resources, good practices, lessons learnt with SALGA and Municipalities.	◎	◎						Plan				NWRI, SALGA	IBTC(Rosa), SALGA (William)	IBTC, SALGA	WB, WSAs, WRC
								Actual							
1-4 Incorporate good practices into training materials.	◎		◎	◎				Plan				NWRI, SALGA	IBTC(Rosa), SALGA (William)	IBTC, SALGA	
								Actual							
1-5 Benchmark water supply services and its skills development in Japan.	◎						○	Plan				DWS, SALGA	DWS, SALGA	DWS, SALGA	WBs, WSAs, SETAs
								Actual							
1-6 Hold a seminar on the result of the baseline survey and benchmark.	◎	◎				◎	○	Plan				NWRI, SALGA	IBTC(Rosa), SALGA (William)	IBTC, SALGA	WBs, WSAs, SETAs, WRC, TVET, Univ
								Actual							
Output 2: IBTC's training management capacity in water supply sector is improved.															
2-1 Review roles and responsibility of IBTC for skills development of Municipalities in water supply sector based on the results of Output-1.	◎	◎	○	○			○	Plan				NWRI, HRD	IBTC(Rosa), HRD (Malome)	IBTC, HRD	SALGA, WBs
								Actual							
2-2 Draft proposed organogram of IBTC including NRW Training Section.	◎	◎	○	○			○	Plan				NWRI, OD	IBTC(Rosa), OD (**)	IBTC, OD	SALGA, P&I, WBs
								Actual							
2-3 Prepare Terms of Reference for Training Sections related to skills development in water supply sector.	◎	◎	○	○			○	Plan				DWS	OS (Kentse)	IBTC, WSLG	NWRI, SALGA, SETAs, WRC, WBs
								Actual							
2-4 Prepare draft Standard Operating Procedures (SOP) of skills development provision.	◎	◎	○	○			○	Plan				IBTC	IBTC(Lerato)	IBTC	HRD, OS
								Actual							
2-5 Revise the SOP through the activities of Output-3.	◎	◎	○	○			○	Plan				IBTC	IBTC(Lerato)	IBTC	HRD, OS
								Actual							
2-6 Draft revised IBTC Strategic Business Model.	◎	◎					○	Plan				NWRI	IBTC(Rosa)	IBTC	HRD, CP, SALGA
								Actual							
2-7 Conduct capacity assessment of IBTC's organization, individuals and facilitators developed.	◎		◎	◎			○	Plan				NWRI, HRD, OD	IBTC(Rosa), SALGA (William)	IBTC, SALGA	WBs, WSAs
								Actual							
Output 3: Trainings on Non-Revenue Water (NRW) are conducted at IBTC.															
3-1 Review situation/needs of skills development on NRW from the results of baseline survey of Activity 1-1.	◎	◎	◎	◎	◎		○	Plan				NWRI, SALGA	IBTC(Rosa), SALGA (William)	IBTC, SALGA	WBs, WSAs, SETAs, WRC, TVET
								Actual							
3-2 Select registered Unit Standards related to NRW from existing qualifications of SAQA.	◎	◎	◎	◎			○	Plan				IBTC, OS, HRD, SALGA	IBTC(Rosa), OS(**), HRD(**), SALGA (William)	IBTC, OS, HRD, SALGA	WBs, WSAs, SETAs
								Actual							
3-3 Design NRW Skills Programme consisting of the selected Unit Standards and supplementary items if any.	◎	◎	◎	◎			○	Plan				IBTC, OS, HRD, SALGA	IBTC(Rosa), OS(**), HRD(**), SALGA (William)	IBTC, OS, HRD, SALGA	WBs, WSAs, SETAs
								Actual							
3-4 Select facilitators (qualified/skilled artisans on water reticulation or equivalent) for NRW Skills Programme from Municipalities and IBTC(DWS).	◎	◎						Plan				NWRI, SALGA	IBTC(Rosa), SALGA (William)	IBTC, SALGA	WBs, WSAs, SETAs
								Actual							
3-5 Schedule Training of Trainer (facilitator) (TOT), Assesors and Moderators for NRW Skills Programme at IBTC.	◎	◎					○	Plan				NWRI, SALGA	IBTC(Rosa), SALGA (William)	IBTC, SALGA	WBs, WSAs, SETAs
								Actual							
3-6 Develop training yard for NRW Skills Programme at IBTC.	○		○	○	◎	◎		Plan				NWRI, SALGA	NWRI(**), IBTC (Rosa), SALGA (William)	NWRI, IBTC	WBs, WSAs
								Actual							
3-7 Procure equipment, instruments/tools and materials for NRW Skills Programme at IBTC.	◎		◎	◎		◎		Plan				NWRI, SALGA	NWRI(**), IBTC (Rosa), SALGA (William)	NWRI, IBTC	WBs, WSAs
								Actual							
3-8 Develop training / learning materials for NRW Skills Programme at IBTC.	◎		◎	◎	○		○	Plan				OS, HRD, IBTC	OS(**), HRD(**), IBTC (Rosa), SALGA (William)	OS, HRD, IBTC	WBs, WSAs
								Actual							
3-9 Conduct TOT by both JICA Experts and South African Facilitators for NRW Skills Programme at IBTC.	◎		◎	◎	○			Plan				NWRI, SALGA	IBTC(Rosa), SALGA (William)	IBTC, SALGA	WBs, WSAs, SETAs
								Actual							
3-10 Develop NRW Skills Programme as an accredited programme by SETA.	○	◎					○	Plan				OS, HRD, IBTC	OS(**), HRD(**), IBTC (Rosa), SALGA (William)	OS, HRD, IBTC	SETAs
								Actual							
3-10a. Apply for registration of facilitators of NRW Skills Programme as assessor/moderator/facilitator from SETA.	○	◎					○	Plan				OS, HRD, IBTC	OS(**), HRD(**), IBTC (Rosa), SALGA (William)	OS, HRD, IBTC	SETAs
								Actual							
3-10b. Prepare Quality Management System of NRW Skills Programme at IBTC.	○	◎					○	Plan				OS, HRD, IBTC	OS(**), HRD(**), IBTC (Rosa), SALGA (William)	OS, HRD, IBTC	SETAs
								Actual							
3-10c. Apply for accreditation of NRW Skills Programme to SETA.	○	◎					○	Plan				OS, HRD, IBTC	OS(**), HRD(**), IBTC (Rosa), SALGA (William)	OS, HRD, IBTC	SETAs
								Actual							
3-11 Prepare Annual Plan of NRW Skills Programme including budget plan at IBTC.	○	◎					○	Plan				NWRI, HRD	IBTC(Rosa), HRD (**)	IBTC, HRD	SALGA
								Actual							
3-12 Recruit participants from Municipalities through SALGA for NRW Skills Programme at IBTC.	○	◎						Plan				IBTC, SALGA	IBTC(Rosa), SALGA (William)	IBTC, SALGA	WBs, WSAs
								Actual							
3-13 Conduct trainings by South African Facilitators for NRW Skills Programme at IBTC.	◎		◎	◎				Plan				IBTC, SALGA	IBTC(Rosa), SALGA (William)	IBTC, SALGA	WBs, WSAs
								Actual							
3-14 Monitor implementation of NRW Skills Programme and feed the results back into Annual Plan and Programme.	◎	◎	◎	◎			○	Plan				IBTC, SALGA	IBTC(Rosa), SALGA (William)	IBTC, SALGA	WBs, WSAs
								Actual							
3-15 Verify effects of NRW Skills Programme and provide necessary support by JICA Experts and IBTC in sampled Municipality(ies) if any.	◎		◎	◎				Plan				IBTC, SALGA	IBTC(Rosa), SALGA (William)	IBTC, SALGA	WBs, WSAs, SETAs
								Actual							





Input	Expert in charge ①	②	③	④	⑤	⑥	⑦	Phase	Remarks	Monitoring: Achievement	Monitoring: Issues & Countermeasures	SA Members in chaege: Responsible Organization	Responsible Person	Implementor	Relevant Partners
Experts															
①-1 Chief Advisor / NRW Management	◎							Plan				DWS, SALGA	IBTC, SALGA	IBTC, SALGA	WBs, WSAs, SETAs
								Actual							
①-2 Deputy-Chief Advisor / NRW Management	◎							Plan				DWS, SALGA	IBTC, SALGA	IBTC, SALGA	WBs, WSAs, SETAs
								Actual							
②Skills Programme Planning / Organization Coordination		◎						Plan				DWS, SALGA	IBTC, SALGA	IBTC, SALGA	WBs, WSAs, SETAs
								Actual							
③Water Leakage Detection			◎					Plan				DWS, SALGA	IBTC, SALGA	IBTC, SALGA	WBs, WSAs, SETAs
								Actual							
④Water Distribution Management / Commercial Loss				◎				Plan				DWS, SALGA	IBTC, SALGA	IBTC, SALGA	WBs, WSAs, SETAs
								Actual							
⑤Training Yard Design and Supervision					◎			Plan				DWS, SALGA	IBTC, SALGA	IBTC, SALGA	WBs, WSAs, SETAs
								Actual							
⑥Procurement / Administrative Coordination						◎		Plan				DWS, SALGA	IBTC, SALGA	IBTC, SALGA	WBs, WSAs, SETAs
								Actual							
Long-Term Expert															
⑦Training Management / Capacity Development							◎	Plan				DWS, SALGA	IBTC, SALGA	IBTC, SALGA	WBs, WSAs, SETAs
								Actual							
Equipment Procurement															
Equipment for Water Leakage Detection	○		◎			◎	◎	Plan				NWRI, SALGA	NWRI(**), IBTC (Rosa), SALGA (William)	NWRI, IBTC	WBs, WSAs
								Actual							
National Consultant/Contractor															
Training Yard Construction	○		○	○	◎	◎	○	Plan				NWRI, SALGA	NWRI(**), IBTC (Rosa), SALGA (William)	NWRI, IBTC	WBs, WSAs
								Actual							
Web Site Development and Maintenance	○					◎		Plan				DWS	IBTC (Rosa)	IBTC	SALGA
								Actual							
Training in Japan															
Phase-1 Training in Japan (for Training Managerment / Decision Making Level)								Plan				DWS, SALGA	IWS, SALGA	IWS, SALGA	SETAs, WSAs
								Actual							
Phase-2 Training in Japan (for Candidate Facilitators / Working Level)								Plan				DWS, SALGA	IWS, SALGA	IWS, SALGA	WBs, WSAs
								Actual							



Monitoring	Phase	Remarks	Monitoring: Achievement	Monitoring: Issues & Countermeasures	SA Members in chaege: Responsible Organization	Responsible Person	Implementor	Relevant Partners
Monitoring								
Joint Coordination Committee	Plan				DWS, SALGA	DWS, SALGA	IWS, SALGA	DIRCO, WBs, WSAs, SETAs
	Actual							
Set-up the Detailed Plan of Operation	Plan				IBTC, SALGA	IBTC(Rosa), SALGA (William)	IBTC, SALGA	JCC members
	Actual							
Submission of Monitoring Sheet	Plan				IBTC, SALGA	IBTC(Rosa), SALGA (William)	IBTC, SALGA	JCC members
	Actual							
Monitoring Mission from Japan	Plan				DWS	DWS	IWS	SALGA, DIRCO
	Actual							
Joint Monitoring	Plan				DWS, SALGA	DWS, SALGA	DWS, SALGA	
	Actual							
Post Monitoring	Plan				DWS, SALGA	DWS, SALGA	DWS, SALGA	
	Actual							
Reports/Documents								
Project Progress Report	Plan				DWS, SALGA	DWS, SALGA	DWS, SALGA	
	Actual							
Project Completion Report	Plan				DWS, SALGA	DWS, SALGA	DWS, SALGA	
	Actual							
Project Brief Note	Plan				DWS, SALGA	DWS, SALGA	DWS, SALGA	
	Actual							
Public Relations								
Web Site	Plan				DWS	IBTC (Rosa)	IBTC	SALGA
	Actual							
Press Release, Press Conference, Public Relations Magazine, Newsletter	Plan				DWS, SALGA	DWS, SALGA	DWS, SALGA	
	Actual							

Appendix 3

List of Joint Coordinating Committee Members

Position in the Project	Title
Chairperson	Chief Director, Global Cooperation, DWS
Alternate	Director, ODA, DWS
South African Side	
Project Director	Director, NWRIB, DWS
Co-Project Director	SALGA
Project Manager	Center Manager, IBTC, DWS
Member	Training Manager, IBTC, DWS
Member	Quality Assurer, IBTC, DWS
Member	ODA, International Water Support, DWS
Municipal Coordinator (Technical)	Director, Water Sustainability & Innovation, SALGA
Japanese Side	
JICA Experts	Chief Advisor and other experts
JICA SA Office	Chief Representative
JICA HQs	Mission Team
Observers	
Embassy of Japan	Representative
Department of International Relations and Cooperation	Representative
Municipalities / Water Boards	Representatives
Energy and Water Sector Education and Training Authority (EWSETA)	Representative
Local Government Sector Education and Training Authority (LGSETA)	Representative

Appendix 4

List of Project Members (South African Side)

Position in the Project	Title
Project Director	Director, NWRIB, DWS
Co-Project Director	SALGA
Project Manager	Center Manager, IBTC, DWS
Member	Training Manager, IBTC, DWS
Member	Quality Assurer, IBTC, DWS
Members	NRW Training Personnel, IBTC, DWS
Municipal Coordinator (Technical)	Director, Water Sustainability & Innovation, SALGA
Municipal Coordinator (HRD)	SALGA and/or Municipal Institute of Learning (eThekweni)
Members	TOT Facilitator
Members	Candidate Facilitator

1. 1st Training in Japan in tentatively February 2018 for (for Training Management)

Proposed Syllabus for 1st Training in Japan in the Phase-1

Contents	Syllabus
[01] Policies concerning HRD toward skill development and succession (Ministry of Health, Labour and Welfare: MHLW)	Approaches towards the sustainability of the water supply service of the water enterprises in the division having a responsibility for the water supply administration in Japan are introduced. In addition, participants receive lectures on technology improvement and succession, and practices of asset management.
[02] Establishment of training system for skill development and succession, information provision / sharing, needs analysis, practical situation and review (Japan Water Works Association: JWWA)	Participants learn about training system construction, grasp of needs, public relations and review in seminars and workshops which are held to train and improve administrative and technical personnel, by the Japan Water Works Association.
[03] Development of training programme for water sector, TOT, procedures of lecture, utilization of training yard (JWWA Branch)	At the Kawaguchi training centre of the Japan Water Works Association, participants observe actual lectures and practical trainings, and learn about securing and training trainers. Also, they receive advice on how to use the technical training yard to be constructed in the Project.
[04] Water supply services and system of large-scale municiaplity (Yokohama Waterworks Bureau: YWWB)	Waterworks policies in Yokohama City keeping around 8% NRW ratio in the past 20 years are introduced based on the data. Participants are given an opportunity to compare it with local situation.
[05] Training system of YWWB	Participants visit waterworks training facility and exchange opinions on training facilities to be introduced in the Project.
[06] Water supply services, skill development, HRD, inter-municipal cooperation of small/medium-scale municipality (Zama City)	Waterworks, capacity development of staffs, and HRD of Zama City which is a small and medium-sized water business entity are introduced. Participants receive a lecture on business management support (cooperation between municipalities) with YWC/Yokohama Waterworks Bureau.
[07] Water Leakage Survey Plan	Water leakage survey is carried out under the water supply plan (master plan), after the plan is formulated. Lecture on general leakage survey plan formulation together with detection methods is given.
[08] Practical experience at Training Facility (recticulation, service pipes and leakage detection)	Yokohama Waterworks Bureau's pipeline training facility will start its operation at the new facility from July 2017. Since this facility can be a sample of technical training yard which will be developed in IBTC, participants will imagine training implementation through the workshop.
[09] Skill Development and HRD of YWWB	The staff 's skill development and HRD are introduced. Participants discuss an effective menu without (or low) budget.
[10] Training management and improvement through PDCA	After receiving lectures on practical training management implemented at YWC and improvement by the PDCA cycle, if they overlap with the training execution time, participants will visit the training site.
[11] Discussion about the Project	Following the above training lectures, workshops, etc., the training management in the Project is discussed.
[12] Preparation of Action Plan/ [13] Presentation	Participants prepare action plans on what activities each participant will carry out in the Project after they return to South Africa, and give a presentation.

Proposed Schedule for 1st Training in Japan in the Phase-1

Date		Contents	Venue
Day 1	Sun	Arrival	
Day 2	Mon	Orientation by JICA, Programme Orientation, and Visit Yokohama Waterworks Bureau	-JICA Yokohama -Yokohama Waterworks Bureau
Day 3	Tue	[01] Policies concerning HRD toward skill development and succession [02] Establishment of training system for skill development and succession, information provision / sharing, needs analysis, practical situation and review	-Ministry of Health, Labor and Welfare Water Supply Division Japan Water Works Association International Division
Day 4	Wed	[03] Development of training programme for water sector, TOT, procedures of lecture, utilization of training yard	-Japan Water Works Association Kawaguchi Training Centre
Day 5	Thu	[04] Water supply services and system of large-scale municiaplity [05] Training system of YWWB	-JICA Yokohama -Tokyo Metropolitan Waterworks Bureau
Day 6	Fri	[06] Water supply services, skill development, HRD, inter-municipal cooperation of small/medium-scale municipality	-Zama-City Waterworks Bureau
Day 7	Sat	Documentation	-JICA Yokohama
Day 8	Sun	Documentation	-JICA Yokohama
Day 9	Mon	[07] Water Leakage Survey Plan [08] Practical experience at Training Facility (recticulation, service pipes and leakage detection)	-JICA Yokohama -Yokohama Waterworks Bureau
Day 10	Tue	[09] Skill Development and HRD of YWWB	-JICA Yokohama
Day 11	Wed	[10] Training maagement and improvement through PDCA	-Yokohama Waterworks Bureau
Day 12	Thu	[11] Discussion about the Project	-JICA Yokohama

Date		Contents	Venue
		[12] Preparation of action plan	
Day 13	Fri	[13] Presentation of action plan, evaluation, certification	-JICA Yokohama
Day 14	Sat	Departure	

2. 2nd Training in Japan in tentatively February 2019 (for Candidate Facilitators)

Proposed Syllabus for 2nd Training in Japan in the Phase-2

Contents	Syllabus
[01] Training programme, TOT, procedures of lecture, utilization of training facilities/yards (JWWB Branch)	At the Kawaguchi training centre of the Japan Water Works Association, participants observe actual lectures and practical trainings, and learn about securing and training trainers. Also, they receive advice on how to use the technical training yard to be constructed in the Project.
[02] Water supply services and system of large-scale municipality (YWWB)	Waterworks policies in Yokohama City keeping around 8% NRW ratio in the past 20 years are introduced based on the data. Participants are given an opportunity to compare it with own situation.
[03] Water balance, NRW components and NRW reduction measures (YWC)	Lecture on the calculation of the components of the NRW ratio in the IWA water balance table and the reduction of each item is given. Participants discuss reduction measures to be taken according to the degree of the NRW ratio.
[04] Water supply plan and pipe replacement plan (YWC)	In addition to countermeasures against NRW, waterworks are managed under the water supply plan. A lecture on the renewal plan of old/vulnerable pipeline which is a pillar of formulation of water supply plan and improvement of NRW ratio is given.
[05] Comprehensive training facility/yard (Bureau of Waterworks Tokyo Metropolitan Gov.)	Participants visit waterworks training facility within Tamagawa water treatment plant in Tokyo and exchange opinions on training facilities to be introduced in the Project.
[06] Water leakage survey plan (YWWB)	Water leakage survey is carried out under the water supply plan (master plan), after the plan is formulated. Lecture on general leakage survey plan formulation together with detection methods is given.
[07] Practical experience at training facility/yard (reticulation, service pipes and leakage detection) of YWWB	Yokohama Waterworks Bureau's pipeline training facility will start its operation at the new facility from July this year. Since this facility can be a sample of technical training yard which will be developed in IBTC, participants will imagine training implementation through the workshop.
[08] Water meter laboratory and error test [09] Water test equipment (YWWB)	Lecture and practice on the calculation and test methods for meter error which is considered to be difficult to calculate in the items of NRW ratio are given. In addition, the creation of a simple flow rate check device for small WSA/WSP without water amount test equipment is introduced.
[10] Meter reading (YWWB)	Meter reading work is closely related to identification of defective meters and discovery of illegal connections. A lecture is given about that improving the quality of this work leads to NRW ratio improvement.
[11] Mapping system and network drawings (YWWB)	Not only digital mapping but also pipeline information ledger as paper medium is a very important tool for water management and pipeline renewal. A lecture on the importance of property management is given.
[12] Construction works and supervision [13] Site visit for water-supply works (YWWB)	Water leakage is often caused by poor pipeline construction, so participants learn about construction management methods in Japan. They also vist actual construction sites and learn improvement points about construction site management and safety control.
[14] Water pressure control and District-Metered Area (YWC)	A lecture about water pressure control to reduce water leakage during the nighttime small amount water usage time and countermeasure of water supply pressure in poor water supply area which to leads to improvement of the revenue water amount, is given. Participants also discuss the introduction method in DMA formation.
[15] Preparation of action plan/ [16] Presentation	Participants prepare action plans on what activities each participant will carry out in the Project after they return to South Africa, and give a presentation.

Proposed Schedule for 2nd Training in Japan in the Phase-2

Date		Contents	Venue
Day 1	Sun	Arrival	
Day 2	Mon	Orientation by JICA, Programme Orientation, and Visit Yokohama Waterworks Bureau	JICA Yokohama Yokohama Waterworks Bureau
Day 3	Tue	[01] Training programme, TOT, procedures of lecture, utilization of training facilities/yards	Japan Water Works Association Kawaguchi Training Centre
Day 4	Wed	[02] Water supply services and system of large-scale municipality [03] Water balance, NRW components and NRW reduction measures	JICA Yokohama

Appendix 5

Date		Contents	Venue
Day 5	Thu	[04] Water supply plan and pipe replacement plan [05] Comprehensive training facility/yard	JICA Yokohama Tokyo Metropolitan Waterworks Bureau
Day 6	Fri	[06] Water leakage survey plan [07] Practical experience at training facility/yard (reticulation, service pipes and leakage detection)	Yokohama Waterworks Bureau
Day 7	Sat	Documentation	JICA Yokohama
Day 8	Sun	Documentation	JICA Yokohama
Day 9	Mon	[08] Water meter laboratory and error test [09] Water test equipment	Yokohama Waterworks Bureau
Day 10	Tue	[10] Meter reading [11] Mapping system and network drawings	Yokohama Waterworks Bureau
Day 11	Wed	[12] Construction works and supervision [13] Site visit for water-supply works [Optional] Water treatment and SCADA system	Yokohama City Yokohama Waterworks Bureau]
Day 12	Thu	[14] Water pressure control and District-Metered Area [15] Preparation of action plan	JICA Yokohama
Day 13	Fri	[16] Presentation of action plan, evaluation, certification	JICA Yokohama
Day 14	Sat	Departure	

MINUTES OF MEETING ON

THE 1ST MEETING OF JOINT COORDINATING COMMITTEE

15th December 2017

including Project Monitoring Sheet Ver.1
(August 2017 to December 2017)

water & sanitation
Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

SOUTH AFRICAN LOCAL GOVERNMENT ASSOCIATION
SALGA
Inspiring service delivery

JICA

MINUTES OF THE FIRST MEETING OF JOINT COORDINATING COMMITTEE (JCC) FOR PROJECT FOR STRENGTHENING THE TRAINING CAPACITY OF IBTC ON NON-REVENUE WATER

DATE: 15th DECEMBER 2017

VENUE: PRETORIA, INFRASTRUCTURE BRANCH TRAINING CENTRE, ROODEPLAAT, BOARDROOM.

TIME: 10H00 – 12H30

COMPILED BY MS SEKGOILANE KGOPUTSO

ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
JCC	JOINT COORDINATING COMMITTEE	ODA	OFFICIAL DEVELOPMENT ASSISTANCE
IBTC	INFRASTRUCTURE BRANCH TRAINING CENTRE	WSID	WATER SECTOR INSTITUTIONAL DEVELOPMENT
JICA	JAPAN INTERNATIONAL COOPERATION AGENCY	OPS	OPERATION SUPPORT
SALGA	SOUTH AFRICAN LOCAL GOVERNMENT ASSOCIATION	WUE	WATER USE EFFICIENCY
DWS	DEPARTMENT OF WATER AND SANITATION	NRW	NON REVENUE WATER
LGSETA	LOCAL GOVERNMENT SECTOR EDUCATION AND TRAINING AUTHORITY	CoGTA	COOPEATIVE GOVERNANCE AND TRADITIONAL AFFAIRS

ATTENDANCE

NAME	SECTION	NAME	SECTION
Mr CHAMINUKA A	CD: ENGINEERING SERVICES, DWS	Mr MORAKA W	SALGA
Mr MMBIDI A	D: ODA, DWS	Ms MATLALA M	SWSS, DWS
Ms MFOMADI-RAHUBE R	IBTC, DWS	Ms MATHIBA KG	OPS, DWS
Mr MONONE V	D: ENGINEERING SERVICES, DWS	Ms RALETJENA M	WUE, DWS
Ms MAKOLA L	IBTC, DWS	Ms NTSHWENI Z	ODA, DWS
Mr SEKI T	CHIEF REPRESENTATIVE JICA SA OFFICE	Mr KOMINE Y	JICA SA OFFICE
Mr YAMAGUCHI I	COUNSELLOR EMBASSY OF JAPAN	Mr ARIMA S	FIRST SECRETARY EMBASSY OF JAPAN
Mr MIYOSHI A	JICA EXPERT	Mr MARUYAMA N	JICA EXPERT

1. ATTENDANCE	ACTION
All present completed the attendance register (refer to Appendix 1).	

2. APPOLOGIES	ACTION
Ms NCHEDI, CD: GLOBAL COOPERATION	

3. WELCOME AND OPENING REMARKS	ACTION
The alternate chairperson: Mr Mmbidi opened the meeting and welcomed all the members. He further expressed the gratitude that DWS has towards JICA since the inception of their cooperation years ago and that they are looking forward for continued relationship. Mr. Isamu Yamaguchi, Counsellor, Embassy of Japan in his remarks also thanked the team members. Then, he gave his remarks (refer to Appendix 2). Mr. Tomohiro Seki, Chief Representative of JICA South Africa Office expressed his gratitude toward project team members. He further reminded the team that the dream was realized during the previous JCC kick off meeting that IBTC will be a Centre for NRW not only for DWS but possibly for Africa as a whole.	

4. JCC AND PROJECT MEMBERS	ACTION
Mr. Mmbidi, made a presentation on selection/update of the JCC members and project members and requested the JCC members to confirm them. After the presentation and discussion in the meeting, the JCC members as a function of decision-making in the Project as well as project members to implement the Project were confirmed as listed in Appendix 3. It was further suggested and agreed that CoGTA be added as part of the JCC member, however it was indicated after the signing off of the report by DWS: Director General the matter will be taken forward to inform them.	Mr Mmbidi to make follow up

5. PRESENTATIONS	ACTION
5.1 WORK PLAN Mr. Akinori Miyoshi, Chief Advisor of JICA Expert Team made a presentation on the draft Work Plan of the Project (refer to Appendix 4), and requested the JCC members to approve the draft Work Plan to proceed the project activities. The Project Team has implemented the project activities in accordance with the outline of project implementation including basic principles, which was agreed in the Kick-off meeting in August 2017. The draft Work Plan was read through among the Project Team previously, then after the presentation and discussion in the meeting, the JCC members approved the draft Work Plan (refer to Appendix 5). However, work procedures and schedule of each activity will be modified/ revised if needed through project implementation. **5.2 PROJECT MONITORING** Ms. Rosa Mfomadi Rahube, Project Manager made a presentation (refer to Appendix 6), on summary of the results of project monitoring and requested the JCC members to recognize issues, countermeasures and approve the draft Project Monitoring Sheet (refer to Appendix 7). Prior to the JCC meeting, the Project Team had a preliminary meeting and discussions on project monitoring and prepared the draft Project Monitoring Sheets, which describe progress, delay, problems and also countermeasures against them. After the presentation and discussion in the meeting, the JCC members approved the draft Project Monitoring Sheets to be submitted to the JICA Headquarters. As highlights in this monitoring, the JCC members confirmed particularly that: **(1) Inputs** While the Japanese side has executed inputs including assignment of JICA Experts, the South African side has executed inputs to implement the Project such as project personnel, project office space and facilities including site survey of candidate location of training yard, and also local costs. WiFi and network will be prepared soon. **(2) Delay of Activity 1-1 (Baseline Survey)**	

The Project selected municipalities as Water Services Authorities (WSA) and water boards to be visited/ interviewed through baseline survey. Although the Project Team has visited/interviewed them with questionnaire, collection of their answers has been not smooth. So, Activity 1-1 is being delayed. DWS, particularly the Directorate of Water Use Efficiency and IBTC, takes responsibility of coordination with Municipalities in collaboration with SALGA, then the Project Team will continue and complete Activity 1-1 by the end of January 2018. **(3) Regular Assignment of Technical Member(s) to IBTC** In view of a concept of technical cooperation and sustainability of NRW Skills Programme at IBTC, the Japanese side expects a technical member(s) to be more involved regularly in the Project at IBTC for day-to-day technical transfer and communication with JICA Experts during the whole period of project implementation. While request-based technical members will be assigned continuously from DWS's headquarters such as Directorates of Engineer Services and Water Use Efficiency, DWS will consider the possibility of regular assignment of personnel to be selected from participants in master degree courses abroad by DWS's Learning Academy (bursary) programme, who will return in March 2018. **5.3 PRACTICALS TIPS ON ESTABLISHING TRAINING CENTRE** Mr. Nobutaka Maruyama, JICA Expert made a presentation on findings and recommendations about establishing a training centre, ideally the one that IBTC should become and made highlights of what to expect ahead as the project team think in preparation of such training centre. (refer to Appendix 8)	

6. THE FIRST TRAINING IN JAPAN	ACTION
Previously South Africa suggested ten (10) candidate delegation officials to the first training in Japan, which is being rescheduled from February 2018 to the second half of April 2018, at the level of management: DWS for four (4), SALGA for one (1), LGSETA for one (1), Municipalities as WSA for three (3) and one (1) for University. However during the discussion of this item the JCC suggested that CoGTA be added to the list of the delegates that will be going for training. The matter on adding one person could not be finalized because JICA team indicated that the matter needed to be decided by JICA headquarters.	JICA to take the matter further of the possibility of adding 1 candidate (in particular from CoGTA). DWS to soon list names of the officials going for training in Japan (even if provisional)

7. QUESTION, DISCUSSIONS AND ANSWERS	ACTION
7.2 Finalisation of baseline survey A suggestion came why should the team focus rearranging the outstanding target visit, instead of focusing on collecting the remaining questionnaires. It was highlighted that the outstanding visits in 10 target (being 8 municipality and two water boards) was part of the targeted output and therefore it has to be followed up, otherwise it will have negative results on the survey since it was also a sample. People who visited particular areas should be the one that make follow up on collection of the questionnaire by the end January 2018. **7.2 Nominees to training in Japan** A question was raised as to why Energy and Water Sector, Education, Training and Authority (EWSETA) shouldn't be added on the list of the nominations to training in Japan, however it was clarified that the number were limited but more over LGSETA was to make meaning contribution to the project as compared to the EWSETA.	DWS, & SALGA to finalise / secure the appointment of the remaining targets, so that visit can be completed by end January 2018. People who visited particular areas to make follow up.
8. CLOSING REMARKS	**ACTION**
At the end of the discussions, Mr. William Moraka, Co-Project Director gave closing remarks. He emphasized that JICA and South Africa came a long way, was happy that the project is taking off and showing the initial results which makes SALGA to be at ease and the confidence to report to authorities.	
9. CLOSURE	**ACTION**
The Chairperson thanked everyone for their contribution and a successful meeting. The meeting was adjourned at 12h30 and the date of the next JCC will be communicated in due course.	
10. APPENDICES	**ACTION**
Appendix 1: Attendance Register	

Appendix 2: Remarks/ Speech document by Mr Isamu Yamaguchi Appendix 3: Updated List of JCC Members; Updated List of Project Members Appendix 4: Presentation by Mr Miyoshi: Work Plan (Draft) Appendix 5: Work Plan (Draft) Appendix 6: Presentation by Ms Rosa: Progress on summary of the results of project monitoring Appendix 7: Project Monitoring Sheet (Version 1) (Draft) Appendix 8: Presentation by Mr Maruyama: Recommendations	

APPROVAL OF THE MINUTES

Mr. Akinori MIYOSHI
Chief Advisor,
Japan International Cooperation Agency
(JICA) Expert Team

Mr Ai Chaminuka
Chief Director: Engineering Services
Department of Water and Sanitation
Republic of South Africa

Mr. Tomohiro Seki
Chief Representative,
JICA South Africa Office

Mr. Willam Moraka
Director, Water Sustainability & Innovation
South Africa Local Government Association,
Republic of South Africa

water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

INFRASTRUCTURE BRANCH TRAINING CENTRE

MEETING: 1st JOINT COORDINATION COMMITTEE MEETING DATE: 15 DECEMBER 2017

Attendance Register

No	Initials & Surname	Designation	Unit	Email	Telephone	Signature
1	[redacted]					
2						
3						
4						
5						
6						
7						
8						

No	Initials & Surname	Designation	Unit	Email	Telephone	Signature
9	[redacted]					
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22						

Chief Director of Department of Water and Sanitation, Ms. Moripe,
Director of DWS, Mr. Mmbibi,
Center Manager of IBTC, Ms. Rahube,
Director of SALGA, Mr. Moraka,
Chief Representative of JICA SA, Mr. Seki,
Chief Advisor of JICA Expert Team, Mr.Miyoshi,
Ladies and Gentlemen,

Good morning. My name is Isamu Yamaguchi, Head of Economy and Development Cooperation, Embassy of Japan.

Allow me to start by thanking DWS and JICA for giving me this opportunity to say a few words on the occasion of the 1st Meeting of Joint Coordinating Committee for the project for strengthening the training capacity of IBTC on Non-Revenue Water.

This project will develop the operation structure of the Infrastructure Branch Training Center (IBTC) and strengthen the training management capacity so that the IBTC can provide training more effectively to SA technicians in the area of non-revenue water.

The Desalination project of NEDO and Hitachi started November 2016 in eThekwini Municipality.

Bilateral negotiation of the Memorandum of Cooperation was concluded. Now, we are expecting the visit of Honorable Minister Ms. Nomvula Mokonyane to Japan early next year.

We are working on holding a big Japan-Africa business forum in early May in South Africa. If realized, water and sanitation infrastructure is one of most important areas. We can build on the discussion at the 2017 Water Infrastructure Investment Summit on 6th December chaired by Honorable Minister Mokonyane.

This project includes training in Japan for those officials in the

management level of DWS, SALGA, municipalities and universities. Maybe as you will learn and see at first hand in near future by participating in the training, Japan has led the water technology in the world through the micro-filtration membrane technology or ozonation in water treatment, to mention a few examples. Japan is also famous for a extremely low leakage rate of waterworks. It is only less than 4% in Tokyo, while being 26% in London, and 35% in Mexico City. Part of this attributes to the generations of Japanese engineers, who carried on the tradition of artisanry to detect the leakage by listening to the sounds on the earth. It's also worth mentioning to the 40 years' efforts of Japanese authorities to steadily replace 26,000 km water distributing pipeline step by step in this regard.

To make this project being successful, mutual cooperation is of great importance. Japanese side will dispatch a very competent and skillful expert team. Japanese side expects the same from DWS through, for example, assigning technical experts from relevant directorates of the department to this project in permanent term.

At the outset of this project, JICA has been conducting the Baseline Survey in some municipalities and water boards. Your cooperation with this survey will be highly appreciated.

In conclusion, it is my sincere wish that today's active discussion will make a great contribution to the jump start of this project.

Thank you for your attention.

Updated List of Joint Coordinating Committee Members

Position in the Project	Title and Name
Chairperson	
Chairperson	Chief Director, Global Cooperation, IWS, DWS Ms. Nchedi Moripe
Alternate	Chief Director, Engineering Services, NWRI, DWS Mr. Al Chaminuka
The South African Side	
Project Director	Director, Engineering Services, NWRI, DWS Mr. Vincent Monene
Co-Project Director	SALGA Mr. William Moraka
Project Manager (Operational)	Centre Manager, IBTC, DWS Ms. Rosa Mfomadi Rahube
Co-Project Manager (Technical)	Director, Water Use Efficiency, P&I, DWS Mr. Thabo Masike
Member	Director, Official Development Assistance, IWS Mr. Albert Mmbidi
Member	Director, Strategic Water Sector Support, P&I, DWS Ms. Iris Mathye
Member	Director, Operational Support, PMU, DWS Ms. Kentse Mathiba
Member * as Municipal Coordinator (Technical)	Director, Water Sustainability & Innovation, SALGA Mr. William Moraka
The Japanese Side	
JICA Experts	Chief Advisor and other Experts
JICA SA Office	Chief Representative
JICA HQs	Mission Team
Observers	
Embassy of Japan	Representative
DIRCO	Representative
Municipalities / Water Boards	Representatives
EWSETA	Representative
LGSETA	Representative
DWS	Director, HRD, DWS Ms. Merriam Moagi
Secretariats	
Secretariat	Training Manager, IBTC, DWS Ms. Kgoputso Sekgoilane
Secretariat	Quality Assurer, IBTC, DWS Ms. Makola Lerato
Secretariat	Secretary to JICA Experts

Updated List of Project Members

Position in the Project	Title and Name
Project Director	Director, Engineering Services, NWRI, DWS Mr. Vincent Monene
Co-Project Director	SALGA Mr. William Moraka
Project Manager (Operational) / Chairperson	Centre Manager, IBTC, DWS Ms. Rosa Mfomadi Rahube
Co-Project Manager (Technical) / Chairperson	Director, Water Use Efficiency, P&I, DWS Mr. Thabo Masike
Member	Director, ODA, IWS, DWS Mr. Albert Mmbidi
Member	Training Manager, IBTC, DWS Ms. Kgoputso Sekgoilane
Member	Quality Assurer, IBTC, DWS Ms. Makola Lerato
Member	Water Use Efficiency, P&I, DWS Mr. Padi Andries / Ms. Khumbu Moyo / Ms. Samke Maboso
Member	Director, Strategic Water Sector Support, P&I, DWS Ms. Iris Mathye
Member	Water Sector Institutional Development, P&I, DWS Ms. Margaret Matlala / Mr. Mtsweni Dennis
Member	Director, Operational Support, PMU, DWS Ms. Kentse Mathiba
Member	Water Sector Skill Development & Special Project, PMU, DWS Mr. Lekubu Lesego
Member	Director, HRD, DWS Ms. Merriam Moagi
Member	HRD, DWS Mr. Matome Makwaeba
Member(s)	NRW Training Personnel, IBTC, DWS (Technical member(s) regularly assigned to IBTC)
Member * as Municipal Coordinator (Technical)	Director, Water Sustainability & Innovation, SALGA Mr. William Moraka
Member * as Municipal Coordinator (HRD)	SALGA and/or Municipal Institute of Learning (e.c. eThekwini Metro) Representative(s)
Members	TOT Facilitators on NRW Skills Programme
Members	Facilitators on NRW Skills Programme
Secretary	Official Development Assistance, IWS, DWS Ms. Mtsweni Zanu

water & sanitation
Department: Water and Sanitation
REPUBLIC OF SOUTH AFRICA

SALGA
Inspiring service delivery

Japan International Cooperation Agency
JICA

Project for Strengthening the Training Capacity of IBTC on Non-Revenue Water in South Africa

Work Plan

1st JCC Meeting

15th December 2017

Project Team

Outline of Presentation

1. Contents of Work Plan
2. Background of the Project
3. Overall Goal, Purpose and Outputs
4. Activities for Output-1
5. Activities for Output-2
6. Activities for Output-3
7. Project Timeline
8. Skills Development Model in Water Supply Sector targeted by the Project

1. Contents of Work Plan

Chap.1	Background and Outline of the Project
Chap.2	Current Status and Issues surrounding the Project, and its Positioning
Chap.3	Principles of Project Implementation
Chap.4	Implementation Methods of the Project (Phase-1: August 2017 - July 2018)
Chap.5	Implementation Methods of the Project (Phase-2: August 2018 - July 2020)
Chap.6	Project Management and Monitoring, and Outcomes
Chap.7	Overall Schedule and Assignment Plan in the Project

2. Background of the Project
Overview and Vulnerability of Water Supply Services

Population in South Africa (2015)
Total : 53.5 Million
Urban Area: 34.7 Million (64.8%)
Rural Area: 18.8 Million (35.2%)

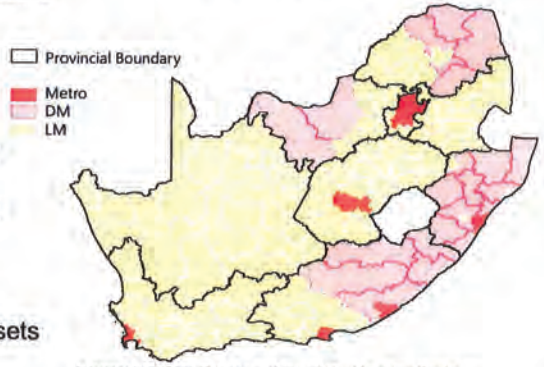
Water Supply Coverage (2015)
Urban Area: 92% (Incl. Yard Tap)
Rural Area: 38% (81% including access to improved water source)

Municipalities: 257
- Metro. Municipality/Metro: 8
- District Municipality/DM: 44
- Local Municipality/LM: 205

Water Supply Authority (WSA): 152
Metro: 8, DM: 21, LM: 123

Vulnerability of Overall WSAs
- ☐ Financial Asset Management
- ☐ Revenue Collection
- ☐ Wastewater/Environmental Safety and Regulatory Compliance
- ☐ Infrastructure Asset Management
- ☐ Staff Skill Levels (Technical)
- ☐ Technical Staff Capacity (Nos.)
- ☐ Financial Management
- ☐ Operation and Maintenance of Assets

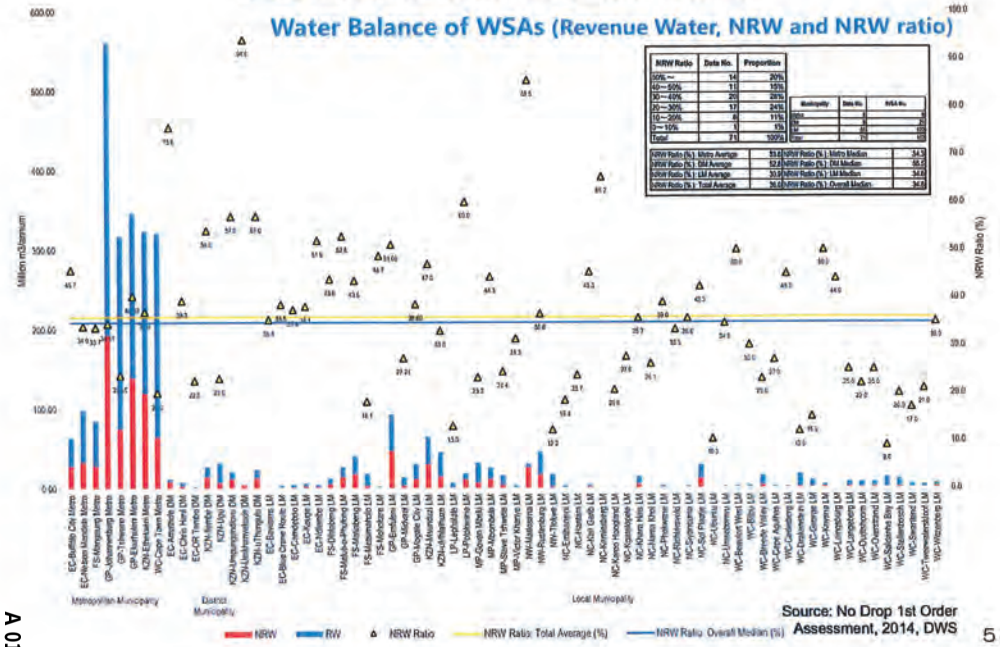
Source: Municipal Strategic Self-Assessment of South Africa, 2014/2015, DWS



Source: Strategic Overview of the Water Services Sector in South Africa, 2015, DWS

2. Background of the Project
Overview of Non-Revenue Water

Water Balance of WSAs (Revenue Water, NRW and NRW ratio)



Source: No Drop 1st Order Assessment, 2014, DWS

What is Non-Revenue Water?

NRW is an indicator of water supply management and O&M, and also is supposed to be kept lower to improve efficiency of water supply services.

Water Balance by International Water Association

System Input Volume	Authorized Consumption	Billed Authorized Consumption	Billed Metered Consumption	Revenue Water
			Billed Unmetered Consumption	
		Unbilled Authorized Consumption	Unbilled Metered Consumption	Non-Revenue Water (NRW)
			Unbilled Unmetered Consumption	
	Water Losses	Commercial (Apparent) Losses	Unauthorized Consumption	
			Customer Metering Inaccuracies and Data Handling Errors	
		Physical (Real) Losses	Leakage on Transmission and/or Distribution Mains	
			Leakage and Overflows at Utility's Storage Tanks	
			Leakage on Service Connections up to Point of Customer Use	

2. Background of the Project
HRD and Skill Development in Water Supply Sector

National Plan & Strategy

■National Development Plan (NDP)
- Improve the system of skills planning and shaping production of skills
- Develop a set of strong qualifications and support for no-formal programmes
- Generate 30,000 artisans per year by 2030

■DWS / National Water Resources Strategy II (NWRS-II)
- "Rapid loss of skilled workers" as a problem of HRD and skill development in water sector

■DHET / National Skills Development Strategy III (NSDS-III)
- "Lack of skills in artisan and expertise" as a problem of HRD and skill development regardless of sector

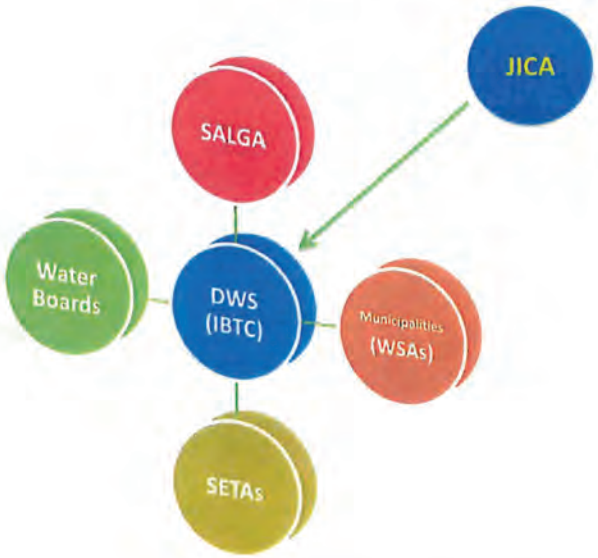
HRD and Skill Development in WSAs

Major Metro WSAs	: Capable of providing own training or outsourcing to private training providers for skill development
Most of WSAs	: Insufficient personnel, skill level and budget allocation ⇒Challenges in HRD and Skill Development NRW: Outsource to private companies if available

2. Background of the Project
Roles to be added for IBTC

- "**An anchor, a hub, coordinating function**" of skill development in water supply sector
- "**An accredited training provider**" and "**a trade tester**" based on the needs of water supply sector.
- Programme, provision and skill development with "**practical trainings**"

2. Background of the Project
Technical Assistance Model expected by DWS



3. Overall Goal, Project Purpose and Outputs

Overall Goal	Non-Revenue Water (NRW) skills development for Municipalities are continuously conducted under the IBTC's direction in collaboration with SALGA.

5 years after the Project

Project Purpose	NRW Skills Programme is continuously provided at IBTC, based on organizational and technical needs.

Output-1	Training information on water supply sector is accumulated at IBTC and shared with SALGA and Municipalities
Output-2	IBTC's training management capacity in water supply sector is improved.
Output-3	Trainings on Non-Revenue Water (NRW) are conducted at IBTC.

Activities for each Output, Inputs from both South Africa and Japan

Project (2017-2020)

4. Activities for Output-1

Training information on water supply sector is accumulated at IBTC and shared with SALGA and Municipalities

Activities for Outut-1

- Activity 1-1: Conduct **baseline survey** on Skills Development in water supply sector (training programme, human resources, materials and O&M).
- Activity 1-2: **Compile and analyze** training resources, good practices, lessons learnt in water supply sector.
- Activity 1-3: **Share** training resources, good practices, lessons learnt **with SALGA and Municipalities**.
- Activity 1-4: **Incorporate** good practices into **training materials**.
- Activity 1-5: **Benchmark** water supply services and its skills development in Japan.
- Activity 1-6: Hold a **seminar** on the result of the baseline survey and benchmark.

5. Activities for Output-2

IBTC's training management capacity in water supply sector is improved.

Activities for Outut-2

- Activity 2-1: **Review roles and responsibility of IBTC** for skills development of Municipalities in water supply sector based on the results of Output-1.
- Activity 2-2: Draft proposed **organogram of IBTC** including NRW Training Section.
- Activity 2-3: Prepare **Terms of Reference** for Training Sections related to skills development in water supply sector.
- Activity 2-4: Prepare draft **Standard Operating Procedures (SOP)** of skills development provision.
- Activity 2-5: **Revise the SOP** through the activities of Output-3.
- Activity 2-6: Draft revised **IBTC Strategic Business Model**.
- Activity 2-7: Conduct **capacity assessment** of IBTC's organization, individuals and facilitators developed.

6. Activities for Output-3

Trainings on Non-Revenue Water (NRW) are conducted at IBTC.

Activities for Outut-3

- Activity 3-1: Review **situation/needs of skills development** on NRW from the results of baseline survey of Activity 1-1.
- Activity 3-2: Select **registered Unit Standards** related to NRW from existing qualifications of SAQA.
- Activity 3-3: Design **NRW Skills Programme** consisting of the selected Unit Standards and supplementary items if any.
- Activity 3-4: Select **facilitators** (qualified/skilled artisans on water reticulation or equivalent) for NRW Skills Programme **from Municipalities and IBTC(DWS)**.
- Activity 3-5: Schedule **Training of Trainer** (facilitator) (TOT), Assessors and Moderators for NRW Skills Programme at IBTC.
- Activity 3-6: Develop **training yard** for NRW Skills Programme at IBTC.
- Activity 3-7: Procure **equipment, instruments/tools and materials** for NRW Skills Programme at IBTC.
- Activity 3-8: Develop **training / learning materials** for NRW Skills Programme at IBTC.

6. Activities for Output-3

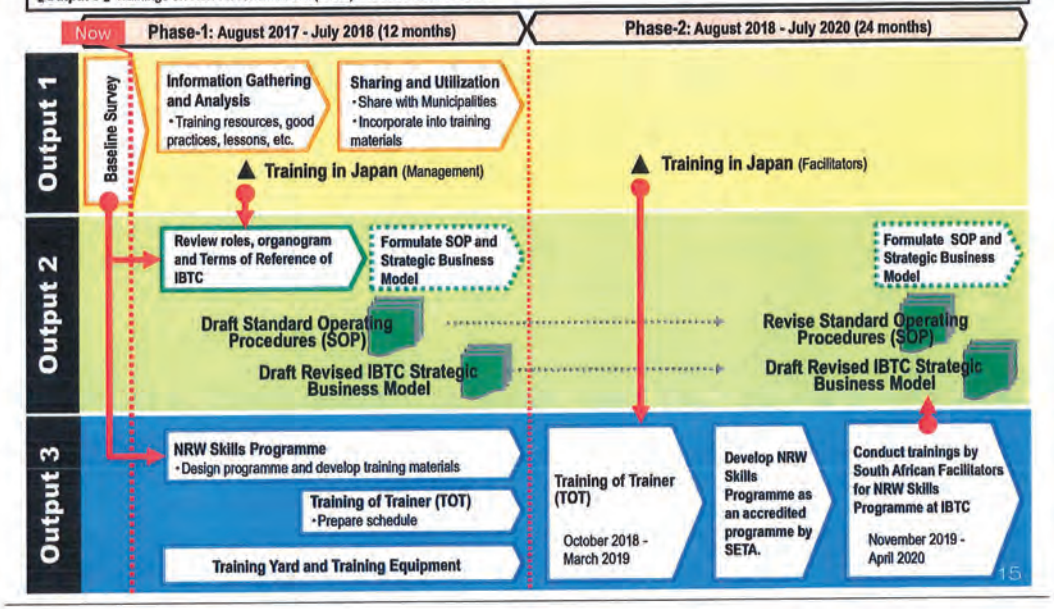
Trainings on Non-Revenue Water (NRW) are conducted at IBTC.

Activities for Outut-3 (continued)

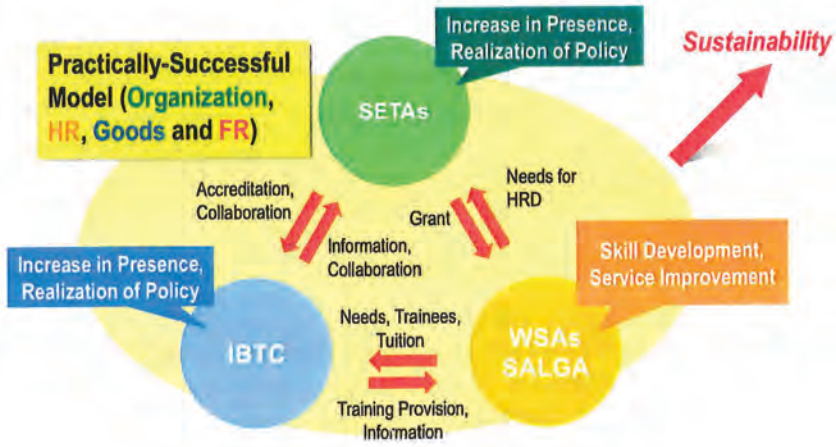
- Activity 3-9: Conduct **TOT** by both JICA Experts and South African Facilitators for NRW Skills Programme at IBTC.
- Activity 3-10: Develop **NRW Skills Programme** as an **accredited** Programme by SETA.
- Activity 3-11: Prepare **Annual Plan** of NRW Skills Programme including **Budget Plan** at IBTC.
- Activity 3-12: **Recruit participants** from Municipalities through SALGA for NRW Skills Programme at IBTC.
- Activity 3-13: Conduct **trainings by South African Facilitators** for NRW Skills Programme at IBTC.
- Activity 3-14: **Monitor implementation** of NRW Skills Programme and **feed the results back** into Annual Plan and Programme.
- Activity 3-15: **Verify effects** of NRW Skills Programme and provide necessary support by JICA Experts and IBTC in sampled Municipality(ies) if any.

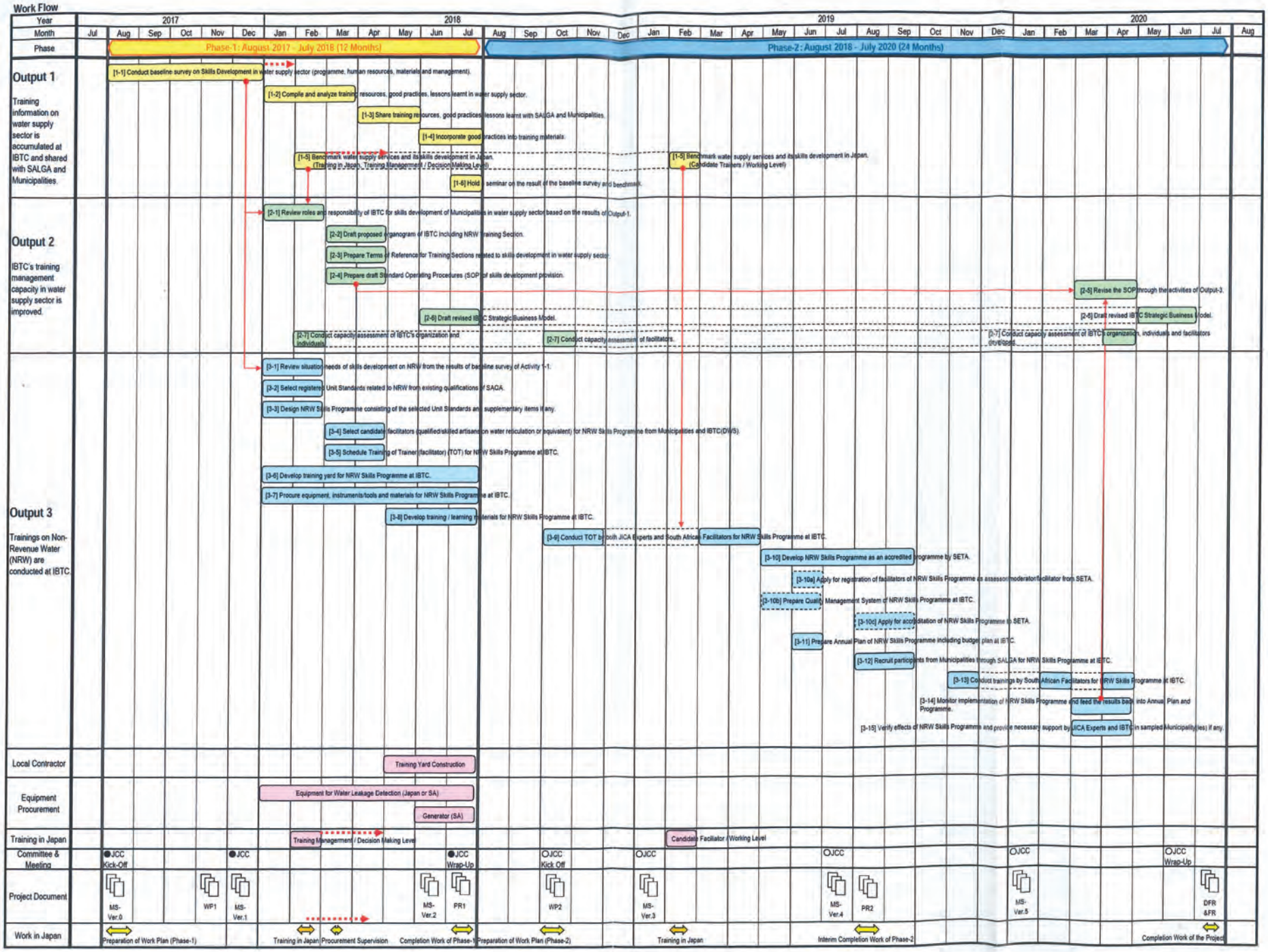
7. Project Timeline

【Overall Goal】 Non-Revenue Water (NRW) skills development for Municipalities are continuously conducted under the IBTC's direction in collaboration with SALGA.
【Project Purpose】 NRW Skills Programme is continuously provided at IBTC, based on organizational and technical needs.
【Output 1】 Training information on water supply sector is accumulated at IBTC and shared with SALGA and Municipalities.
【Output 2】 IBTC's training management capacity in water supply sector is improved.
【Output 3】 Trainings on Non-Revenue Water (NRW) are conducted at IBTC.



8. Skills Development Model in Water Supply Sector targeted by the Project




Work Flow
Year
Month
Phase
2017
2018
2019
2020
Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug
Phase-1: August 2017 - July 2018 (12 Months)
Phase-2: August 2018 - July 2020 (24 Months)
Output 1
Training information on water supply sector is accumulated at IBTC and shared with SALGA and Municipalities.
[1-1] Conduct baseline survey on Skills Development in water supply sector (programme, human resources, materials and management).
[1-2] Compile and analyze training resources, good practices, lessons learnt in water supply sector.
[1-3] Share training resources, good practices, lessons learnt with SALGA and Municipalities.
[1-4] Incorporate good practices into training materials.
[1-5] Benchmark water supply services and its skills development in Japan. (Training in Japan), Training Management / Decision Making Level)
[1-5] Benchmark water supply services and its skills development in Japan. (Candidate Trainers / Working Level)
[1-6] Hold seminar on the result of the baseline survey and benchmark.
Output 2
IBTC's training management capacity in water supply sector is improved.
[2-1] Review roles and responsibility of IBTC for skills development of Municipalities in water supply sector based on the results of Output-1.
[2-2] Draft proposed organogram of IBTC including NRW Training Section.
[2-3] Prepare Terms of Reference for Training Sections related to skills development in water supply sector.
[2-4] Prepare draft Standard Operating Procedures (SOP) of skills development provision.
[2-5] Revise the SOP through the activities of Output-3.
[2-6] Draft revised IBTC Strategic Business Model.
[2-6] Draft revised IBTC Strategic Business Model.
[2-7] Conduct capacity assessment of IBTC's organization and individuals.
[2-7] Conduct capacity assessment of facilitators.
[2-7] Conduct capacity assessment of IBTC's organization, individuals and facilitators (revised)
Output 3
Trainings on Non-Revenue Water (NRW) are conducted at IBTC.
[3-1] Review situation / needs of skills development on NRW from the results of baseline survey of Activity 1-1.
[3-2] Select registered Unit Standards related to NRW from existing qualifications of SAQA.
[3-3] Design NRW Skills Programme consisting of the selected Unit Standards and supplementary items if any.
[3-4] Select candidate facilitators (qualified/skilled artisans on water reticulation or equivalent) for NRW Skills Programme from Municipalities and IBTC(DWS).
[3-5] Schedule Training of Trainer (facilitator) (TOT) for NRW Skills Programme at IBTC.
[3-6] Develop training yard for NRW Skills Programme at IBTC.
[3-7] Procure equipment, instruments/tools and materials for NRW Skills Programme at IBTC.
[3-8] Develop training / learning materials for NRW Skills Programme at IBTC.
[3-9] Conduct TOT by both JICA Experts and South African Facilitators for NRW Skills Programme at IBTC.
[3-10] Develop NRW Skills Programme as an accredited programme by SETA.
[3-10a] Apply for registration of facilitators of NRW Skills Programme as assessor/moderator/facilitator from SETA.
[3-10b] Prepare Quality Management System of NRW Skills Programme at IBTC.
[3-10c] Apply for accreditation of NRW Skills Programme to SETA.
[3-11] Prepare Annual Plan of NRW Skills Programme including budget plan at IBTC.
[3-12] Recruit participants from Municipalities through SALGA for NRW Skills Programme at IBTC.
[3-13] Conduct trainings by South African Facilitators for NRW Skills Programme at IBTC.
[3-14] Monitor implementation of NRW Skills Programme and feed the results back into Annual Plan and Programme.
[3-15] Verify effects of NRW Skills Programme and provide necessary support by JICA Experts and IBTC (in sampled Municipality(ies) if any.
Local Contractor
Training Yard Construction
Equipment Procurement
Equipment for Water Leakage Detection (Japan or SA)
Generator (SA)
Training in Japan
Training Management / Decision Making Level
Candidate Facilitator / Working Level
Committee & Meeting
●JCC Kick-Off
●JCC
●JCC Wrap-Up
○JCC Kick Off
○JCC
○JCC
○JCC
○JCC Wrap-Up
Project Document
MS-Ver.0
WP1
MS-Ver.1
MS-Ver.2
PR1
WP2
MS-Ver.3
MS-Ver.4
PR2
MS-Ver.5
DFR &FR
Work in Japan
Preparation of Work Plan (Phase-1)
Training in Japan
Procurement Supervision
Completion Work of Phase-1
Preparation of Work Plan (Phase-2)
Training in Japan
Interim Completion Work of Phase-2
Completion Work of the Project

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Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

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Project for Strengthening the Training Capacity of IBTC on Non-Revenue Water

Results of Project Monitoring (August - December 2017)

A 01 - 32

Presentation Outline

- Project Monitoring Sheets
- Progress of Inputs
- Progress of Activities
- Challenges and Wayforward
- Modification of "Plan of Operation"

Project Monitoring Sheets

Contents of Project Monitoring Sheets includes the following:

I. Summary

1. Progress

1-1 Progress of Inputs
1-2 Progress of Activities
1-3 Achievement of Outputs
1-4 Achievement of Project Purpose
1-5 Changes of Risks and Actions for Mitigation
1-6 Other remarkable/considerable issues related/affect to the Project

Project Monitoring Sheets

2. Delay of Work Schedule and/or Problems (Challenges and Wayforward)

2-1 Detail
2-2 Cause
2-3 Action to be taken
2-4 Roles of Responsible Persons/Organization

3. Modification of the Project Implementation Plan

3-1 Plan of Operation
3-2 Other modifications on detailed implementation plan

4. Preparation by the South African side after completion of the Project

II. Project Monitoring Sheet I & II

Progress of Inputs (SA)

- **Project Personnel**

DWS, SALGA and Task Team were actively involved in the Project since August 2017.
Task Team updated/finalised lists of JCC members and also project members.

- **Operational Requirements (Land, Building and Facilities)**

IBTC provided office space to JICA Experts.
Network issues including WiFi are still outstanding (Mr. Mmbidi will submit approval to IBTC for implementation).

- **Local Costs**

DWS and SALGA provided travelling costs to their members who supported Baseline Survey which was conducted in October and November 2017.

A 01 - 33

Progress of Inputs (JPN)

- **JICA Experts**

JICA Expert Team consisting of a Chief Advisor and members for seven areas of expertise were assigned to work in South Africa between August and December 2017.

- **Equipments**

Preliminary design including specifications, quantity survey and procurement process of training yard to be constructed by the Japanese side at IBTC is ongoing.

- **Facilities**

Preliminary design including specifications, quantity survey and procurement process of training yard to be constructed by the Japanese side at IBTC is ongoing.
Site survey was done by Engineering Services, NWRI, DWS.

Progress of Inputs (JPN)

- **Training in Japan**

The first training is rescheduled from February 2018 to April 2018 (still to be confirmed).
Only senior managers will be part of the first training.
The following Departments / Institutions were identified and confirmed by the Task Team.

- DWS: 4 (NWRI, P&I, IWS and OS)
- SALGA: 1
- LGSETA: 1
- WSAs: 3 (e.g. eThekwini, Tshwane and Cape Town)
- University: 1 (e.g. Tshwane University of Technology)

Progress of Activities

According to the schedule of Work Plan,

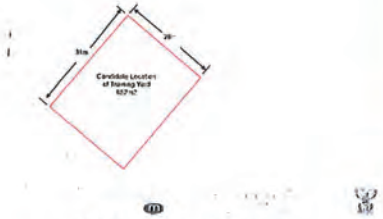
- **Activity 1-1: Conduct baseline survey on Skills Development in water supply sector (programme, human resources, materials and management).**
  Progress: 35%, Behind: 1.0 months.
  Questionnaire including spreadsheet were circulated to targeted WSAs and water boards before Baseline Survey was conducted.
  The Task Team selected 44 out of 152 municipalities, WSAs and 7 water boards to be visited/ interviewed through baseline survey (51 targets).
  The Project Team has visited/interviewed 36 municipalities and 5 water boards (41 targets. 80% of all targets).

Mbombela LM in Mpumalanga

Some LMs (Joint) in Western Cape

Pipe Fixing Training Yard of eThekwini Metro in KZN

Leak Detection Training Yard of Ugu DM in KZN



Site Survey Drawing

Discussion of Training Yard in DWS (Quantity Survey)

Confirmation of Underground Pipe at Candidate Location of Training Yard in IBTC

Visit to Private Company for Leak Detection Equipment

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Progress of Activities

In-advanced progress,

- **Activity 3-6: Develop training yard for NRW Skills Programme at IBTC.**
  Progress: 10%, Delay: 0.0 month.
  Preliminary design including specifications, quantity survey and procurement process is ongoing. And, site survey for candidate location was done.
- **Activity 3-7: Procure equipment, instruments/tools and materials for NRW Skills Programme at IBTC.**
  Progress: 10%, Delay: 0.0 month.
  Preliminary design on specifications, quantity and procurement process of equipment such as leakage detection devices is ongoing.

Challenges and Wayforward

1. **Delay of Activity 1-1: Conduct baseline survey on Skills Development in water supply sector (programme, human resources, materials and management).**

Situation

Delayed for a month (Dec.).
Only 9 questionnaires was received
Remaining 108 municipalities has been little progressed.
8 Outstanding targeted municipalities and 2 water board to be visited/interviewed.

Challenges and Wayforward

Cause

There were some challenges on coordination (e.g. in some places wrong people were available, some appointment not confirmed, some not available). Most targeted municipalities were visited, however the responses (questionnaires) was poor.

Challenges and Wayforward

Action to be taken and Roles

DWS , particularly Directorate of Water Use Efficiency and IBTC take responsibility of coordination with Municipalities in collaboration with SALGA, then the Project Team will continue and complete the Activity by the end of January 2018.

Item	Action	Dec	Jan	Feb	Mar
Coordination with Municipalities	DWS takes responsibility of coordination with Municipalities in collaboration with SALGA.				
Un-visited/interviewed ten out of 51 targets	The Project Team will visit/interview them in January 2018.				
Collection of answers from 51 targets	The Project Team will complete it by the end of January 2018.				
Re-sending of questionnaires, reminding to 108 Municipalities and collection of answers	The Project Team will complete it by the end of January 2018.				
Data analysis (Activity 1-2)	The Project Team will complete it by March 2018.				

Challenges and Wayforward

2. Regular Assignment of Technical Member(s) to IBTC

Situation

As an input from the South African side, the Japanese side has requested a technical member(s) assigned to the Project at IBTC. Currently, request-based technical members have been assigned from DWS's headquarters such as the Chief Directorate of Engineering Services and the Directorate of Water Use Efficiency.

However, in view of a concept of technical cooperation and sustainability of NRW Skills Programme at IBTC, the Japanese side expects a technical member(s) to be more involved routinely in the Project at IBTC for day-to-day technical transfer and communication with JICA Experts during the whole period of project implementation.

Challenges and Wayforward

2. Regular Assignment of Technical Member(s) to IBTC

Cause

Relevant directorates and IBTC of DWS don't have capacity in terms of personnel.

Action to be taken and Roles

While request-based technical members will be assigned continuously from DWS's headquarters such as the Directorates of Engineer Services and Water Use Efficiency,

DWS will consider the possibility of regular assignment of personnel to be selected from participants in master degree courses abroad by DWS's Learning Academy (bursary) programme, who will return in March 2018.

Modification of "Plan of Operation"

Relevant partners in Plan of Operation were updated: **Directorate of Water Use Efficiency** of DWS, and Acting Director as a **Co-Project Manager** for technical aspects.

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The Project Team kindly requests JCC members to approve the progress of the Project Monitoring Sheets.

Thank You.

THE END

To Chief Representative of JICA South Africa Office

PROJECT MONITORING SHEETS (DRAFT)

Project Title: Project for Strengthening the Training Capacity of IBTC on Non-Revenue Water
Version of the Sheet: Ver. 1 (Term covered: August, 2017 - December, 2017)

Name: Akinori Miyoshi
Title: Chief Advisor
Submission Date: 15 December 2017

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II. Project Monitoring Sheet I & II 13

Annex 13

Abbreviations 14

I. Summary

1 Progress

1-1 Progress of Inputs

[The South African Side]

Project Personnel

All project members including Project Director, Project Manager, members and coordinators have been involved in the Project. In the implementation of the Project since August 2017, Joint Coordinating Committee (JCC) members were updated as follows:

Table 1 Updated List of JCC Members

Position in the Project	Kick-off Meeting (Aug. 2017)	JCC Meeting (Dec. 2017)
Chairperson		
Chairperson	Chief Director, Global Cooperation, DWS	Chief Director, Global Cooperation, IWS, DWS Ms. Nchedi Moripe
Alternate	Director, ODA, DWS	Chief Director, Engineering Services, NWRI, DWS Mr. Al Chaminuka
The South African Side		
Project Director	Director, NWRIB, DWS	Director, Engineering Services, NWRI, DWS Mr. Vincent Monene
Co-Project Director	SALGA	SALGA Mr. William Moraka
Project Manager (Operational)	Centre Manager, IBTC, DWS	Centre Manager, IBTC, DWS Ms. Rosa Mfomadi Rahube
Co-Project Manager (Technical)	-	Director, Water Use Efficiency, P&I, DWS Mr. Thabo Masike
Member	-	Director, Official Development Assistance, IWS Mr. Albert Mmbidi
Member	-	Director, Strategic Water Sector Support, P&I, DWS Ms. Iris Mathye
Member	-	Director, Operational Support, PMU, DWS Ms. Kentse Mathiba
Member	Training Manager, IBTC, DWS	-
Member	Quality Assurer, IBTC, DWS	-
Member * as Municipal Coordinator (Technical)	Director, Water Sustainability & Innovation, SALGA	Director, Water Sustainability & Innovation, SALGA Mr. William Moraka

Position in the Project	Kick-off Meeting (Aug. 2017)	JCC Meeting (Dec. 2017)
The Japanese Side		
JICA Experts	Chief Advisor and other Experts	Chief Advisor and other Experts
JICA SA Office	Chief Representative	Chief Representative
JICA HQs	Mission Team	Mission Team
Observers		
Embassy of Japan	Representative	Representative
DIRCO	Representative	Representative
Municipalities / Water Boards	Representatives	Representatives
EWSETA	Representative	Representative
LGSETA	Representative	Representative
DWS	-	Director, HRD, DWS Ms. Merriam Moagi
Secretariats		
Secretariat	-	Training Manager, IBTC, DWS Ms. Kgoputso Sekgoilane
Secretariat	-	Quality Assurer, IBTC, DWS Ms. Makola Lerato
Secretariat	-	Secretary to JICA Experts

Also, project members from the South African side were updated as follows:

Table 2 Updated List of Project Members

Position in the Project	Kick-off Meeting (Aug. 2017)	JCC Meeting (Dec. 2017)
Project Director	Director, NWRIB, DWS	Director, Engineering Services, NWRI, DWS Mr. Vincent Monene
Co-Project Director	SALGA	SALGA Mr. William Moraka
Project Manager (Operational) / Chairperson	Centre Manager, IBTC, DWS	Centre Manager, IBTC, DWS Ms. Rosa Mfomadi Rahube
Co-Project Manager (Technical) / Chairperson	-	Director, Water Use Efficiency, P&I, DWS Mr. Thabo Masike
Member	-	Director, ODA, IWS, DWS Mr. Albert Mmbidi
Member	Training Manager, IBTC, DWS	Training Manager, IBTC, DWS Ms. Kgoputso Sekgoilane
Member	Quality Assurer, IBTC, DWS	Quality Assurer, IBTC, DWS Ms. Makola Lerato
Member	-	Water Use Efficiency, P&I, DWS Mr. Padi Andries / Ms. Khumbu Moyo / Ms. Samke Maboso
Member	-	Director, Strategic Water Sector Support, P&I, DWS Ms. Iris Mathye

Position in the Project	Kick-off Meeting (Aug. 2017)	JCC Meeting (Dec. 2017)
Member	-	Water Sector Institutional Development, P&I, DWS Ms. Margaret Matlala / Mr. Mtsweni Dennis
Member	-	Director, Operational Support, PMU, DWS Ms. Kentse Mathiba
Member	-	Water Sector Skill Development & Special Project, PMU, DWS Mr. Lekubu Lesego
Member	-	Director, HRD, DWS Ms. Merriam Moagi
Member	-	HRD, DWS Mr. Matome Makwaeba
Member(s)	NRW Training Personnel, IBTC, DWS	NRW Training Personnel, IBTC, DWS (Technical member(s) regularly assigned to IBTC)
Member * as Municipal Coordinator (Technical)	Director, Water Sustainability & Innovation, SALGA	Director, Water Sustainability & Innovation, SALGA Mr. William Moraka
Member * as Municipal Coordinator (HRD)	SALGA and/or Municipal Institute of Learning (e.c. eThekwini Metro)	SALGA and/or Municipal Institute of Learning (e.c. eThekwini Metro) Representative(s)
Members	TOT Facilitators on NRW Skills Programme	TOT Facilitators on NRW Skills Programme
Members	Facilitators on NRW Skills Programme	Facilitators on NRW Skills Programme
Secretary	-	Official Development Assistance, IWS, DWS Ms. Mtsweni Zanu

The above updates of project personnel will be reflected to Project Design Matrix (PDM) when PDM needs to be revised officially.

Land, Building and Facilities

Office spaces and necessary facilities at the Infrastructure Branch Training Centre (IBTC) have been provided to the Japanese side. WiFi and network will be prepared soon.

Local Costs

Administrative costs in IBTC as well as operational costs for local traveling of project members, communication and etc. have been provided by the South African side.

[The Japanese Side]

JICA Experts

JICA Expert Team consisting of a Chief Advisor and members for seven areas of expertise were

assigned to work in South Africa between August 2017 and December 2017 (refer to Table 3).

Table 3 List of JICA Experts

Position in the Project	Name	Month in SA
Chief Advisor / NRW Management	Mr. Akinori MIYOSHI	1.87
Deputy Chief Advisor / NRW Management	Mr. Taketoshi FUJIYAMA	0.97
Skills Programme Planning / Organization Coordination	Mr. Kenichiro SUGIYA	1.83
Water Leakage Detection	Mr. Hiroki NIIMURA	1.00
Water Distribution Control / Commercial Loss	Mr. Hiroyuki MORITA	0.00
Training Yard Design and Supervision	Mr. Masuji IDE	1.30
Procurement / Administrative Coordination	Ms. Mariko KOBAYASHI Mr. Hiroki NIIMURA	1.80
Training Management / Human Resource Development	Mr. Nobutaka MARUYAMA	2.50
Total		11.27

Equipment

Preliminary design on specifications, quantity and procurement process of equipment such as leakage detection devices is ongoing.

Facilities

Preliminary design including specifications, quantity survey and procurement process of training yard to be constructed by the Japanese side in IBTC is ongoing jointly with the Directorate of Engineering Services of National Water Resources Infrastructure (NWRI), Department of Water and Sanitation (DWS).

Site survey for candidate location of training yard was done by the Directorate of Engineering Services.

Training of the South African Project Members

The first training in Japan, which is being rescheduled from February 2018 to the second half of April 2018, for ten delegation officials at the level of management from DWS, South African Local Government Association (SALGA), Local Government Sector Education and Training Authority (LGSETA), Municipalities as Water Services Authorities (WSA) and University has been discussed.

1-2 Progress of Activities

[Activities for Output-1: Training information on water supply sector is accumulated at IBTC and shared with SALGA and Municipalities.]

Table 4 Progress of Activities for Output-1

No	Activity	Previous Monitoring (None)	Current Monitoring (as at Dec.2017)
1-1	Conduct baseline survey on Skills Development in water supply sector (programme, human resources, materials and management).	-	Progress: 35%, Behind: 1.0 months The Project selected 44 out of 152 municipalities as WSAs and seven water boards to be visited/interviewed through baseline survey (51 targets). Refer to Annex-1 and Annex-2. The Project Team has visited/interviewed 36 municipalities and five water boards with questionnaire including spreadsheet (41 targets. 80% of all targets). However, the Project Team received answers from nine targets only, and questionnaire survey by email to other remaining 108 municipalities has been little progressed.
1-2	Compile and analyze training resources, good practices, lessons learnt in water supply sector.	-	None (as planned).
1-3	Share training resources, good practices, lessons learnt with SALGA and Municipalities.	-	None (as planned).
1-4	Incorporate good practices into training materials.	-	None (as planned).
1-5	Benchmark water supply services and its skills development in Japan.	-	None (as planned).
1-6	Hold a seminar on the result of the baseline survey and benchmark.	-	None (as planned).

[Activities for Output-2: IBTC's training management capacity in water supply sector is improved.]

Table 5 Progress of Activities for Output-2

No	Activity	Previous Monitoring (None)	Current Monitoring (as at Dec.2017)
2-1	Review roles and responsibility of IBTC for skills development of Municipalities in water supply sector based on the results of Output-1.	-	None (as planned).
2-2	Draft proposed organogram of IBTC including NRW Training Section.	-	None (as planned).
2-3	Prepare Terms of Reference for Training Sections related to skills development in water supply sector.	-	None (as planned).
2-4	Prepare draft Standard Operating Procedures (SOP) of skills development provision.	-	None (as planned).
2-5	Revise the SOP through the activities of Output-3.	-	None (as planned).
2-6	Draft revised IBTC Strategic Business Model.	-	None (as planned).
2-7	Conduct capacity assessment of IBTC's organization, individuals and facilitators developed.	-	None (as planned).

[Activities for Output-3: Trainings on Non-Revenue Water (NRW) are conducted at IBTC.

Table 6 Progress of Activities for Output-3

No	Activity	Previous Monitoring (None)	Current Monitoring (as at Dec.2017)
3-1	Review situation/needs of skills development on NRW from the results of baseline survey of Activity 1-1.	-	None (as planned).
3-2	Select registered Unit Standards related to NRW from existing qualifications of SAQA.	-	None (as planned).
3-3	Design NRW Skills Programme consisting of the selected Unit Standards and supplementary items if any.	-	None (as planned).
3-4	Select facilitators (qualified/skilled artisans on water reticulation or equivalent) for NRW Skills Programme from Municipalities and IBTC (DWS).	-	None (as planned).
3-5	Schedule Training of Trainer (facilitator) (TOT), Assessors and Moderators for NRW Skills Programme at IBTC.	-	None (as planned).
3-6	Develop training yard for NRW Skills Programme at IBTC.	-	Progress: 10%, Delay: 0.0 month Ahead of schedule, preliminary design including specifications, quantity survey and procurement process is ongoing. And, site survey for candidate location was done. Refer to Annex-3.
3-7	Procure equipment, instruments/tools and materials for NRW Skills	-	Progress: 10%, Delay: 0.0 month Ahead of schedule, preliminary design on specifications, quantity

No	Activity	Previous Monitoring (None)	Current Monitoring (as at Dec.2017)
	Programme at IBTC.		and procurement process of equipment such as leakage detection devices is ongoing.
3-8	Develop training / learning materials for NRW Skills Programme at IBTC.	-	None (as planned).
3-9	Conduct TOT by both JICA Experts and South African Facilitators for NRW Skills Programme at IBTC.	-	None (as planned).
3-10	Develop NRW Skills Programme as an accredited programme by SETA. 3-10a Apply for registration of facilitators of NRW Skills Programme as assessor/moderator/facilitator from SETA. 3-10b Prepare Quality Management System of NRW Skills Programme at IBTC. 3-10c Apply for accreditation of NRW Skills Programme to SETA.	-	None (as planned).
3-11	Prepare Annual Plan of NRW Skills Programme including budget plan at IBTC.	-	None (as planned).
3-12	Recruit participants from Municipalities through SALGA for NRW Skills Programme at IBTC.	-	None (as planned).
3-13	Conduct trainings by South African Facilitators for NRW Skills Programme at IBTC.	-	None (as planned).
3-14	Monitor implementation of NRW Skills Programme and feed the results back into Annual Plan and Programme	-	None (as planned).
3-15	Verify effects of NRW Skills Programme and provide necessary support by JICA Experts and IBTC in sampled Municipality(ies) if any.	-	None (as planned).

1-3 Achievement of Outputs

[Output-1: Training information on water supply sector is accumulated at IBTC and shared with SALGA and Municipalities.]

Table 7 Achievement of Output-1

No	Indicator	Previous Monitoring (None)	Current Monitoring (as at Dec.2017)
1-1	List of training resources (by providers, programmes, human resources, manuals, subsidies/grants, etc.)	-	None (as planned).
1-2	Benchmarked matrix (summary) of Japan and South Africa on water services (comparative features, strength/weakness, methodology, etc.)	-	None (as planned).
Verification of Achievement and Implementing Process Indicators won't be obtained during this monitoring period, but training resources have been surveyed in baseline survey.			

[Output-2: IBTC's training management capacity in water supply sector is improved.]

Table 8 Achievement of Output-2

No	Indicator	Previous Monitoring (None)	Current Monitoring (as at Dec.2017)
2-1	IBTC organization / individual performance / capacity	-	None (as planned).
2-2	Progress of Organizational setting update	-	None (as planned).
2-3	Record of SOPs (actual revisions)	-	None (as planned).
2-4	Progress of update of IBTC Strategic Business Model	-	None (as planned).
Verification of Achievement and Implementing Process Indicators won't be obtained and there is no implementation during this monitoring period.			

[Output-3: IBTC's training management capacity in water supply sector is improved.]

Table 9 Achievement of Output-3

No	Indicator	Previous Monitoring (None)	Current Monitoring (as at Dec.2017)
3-1	Actual trainings on NRW Skills Programme (No. of trainings, trainees)	-	None (as planned).
3-2	Appropriateness of NRW Skills Programme (trainees' evaluation)	-	None (as planned).
3-3	Utilization of IBTC's skills training at sampled Municipality(ies)	-	None (as planned).
Verification of Achievement and Implementing Process Indicators won't be obtained and there is no implementation during this monitoring period.			

1-4 Achievement of the Project Purpose

[Project Purpose: NRW Skills Programme is continuously provided at IBTC, based on organizational and technical needs.]

Table 10 Achievement of the Project Purpose

No	Indicator	Previous Monitoring (None)	Current Monitoring (as at Dec.2017)
1	Actual trainings (No. of trainings / trades or skills)	-	None (as planned).
2	IBTC organization / individual performance / capacity	-	None (as planned).
3	Programmes planned in Strategic Business Model (trades or skills)	-	None (as planned).
4	Status of accreditation of NRW Unit Standards applied to SETA	-	None (as planned).
Verification of Achievement and Implementing Process Indicators won't be obtained and there is no implementation during this monitoring period.			

1-5 Changes of Risks and Actions for Mitigation

No concerns over project implementation.

(1) Progress of Actions undertaken by the Japanese side

None.

(2) Progress of Actions undertaken by the South African side

None.

1-6 Other remarkable/considerable issues related/affect to the Project (such as other JICA's projects, activities of counterparts, other donors, private sectors, NGOs etc.)

None.

2 Delay of Work Schedule and/or Problems (if any)

2-1 Detail

(1) Delay of Activity 1-1 (Baseline Survey)

The Activity's progress is 35% and 1.0 month behind to schedule.

The Project selected 44 out of 152 municipalities as WSAs and seven water boards to be visited/interviewed through baseline survey (51 targets). The Project Team has visited/interviewed 36 municipalities and five water boards with questionnaire including spreadsheet (41 target. 80% of all targets).

However, the Project Team received answers from nine targets only, and questionnaire survey by email to other remaining 108 municipalities has been little progressed.

(2) Regular Assignment of Technical Member(s) to IBTC

As an input from the South African side, the Japanese side has requested a technical member(s) assigned to the Project at IBTC. Currently, request-based technical members have been assigned from DWS's headquarters such as the Directorates of Engineer Services and Water Use Efficiency.

However, in view of a concept of technical cooperation and sustainability of Non-Revenue Water (NRW) Skills Programme at IBTC, the Japanese side expects a technical member(s) to be more involved regularly in the Project at IBTC for day-to-day technical transfer and communication with JICA Experts during the whole period of project implementation.

2-2 Cause

(1) Delay of Activity 1-1 (Baseline Survey)

Coordination to schedule visits with Municipalities was defective most of the time. For example, questionnaire did not reached to right person of Municipalities. In addition, some municipalities are slow to respond to survey questionnaire in spite of follow-up by DWS.

(2) Regular Assignment of Technical Member(s) to IBTC

Relevant directorates and IBTC of DWS don't have capacity in terms of personnel.

2-3 Action to be taken

(1) Delay of Activity 1-1 (Baseline Survey)

DWS takes responsibility of coordination with Municipalities in collaboration with SALGA, then the Project Team will continue and complete the Activity by the end of January 2018 as follows:

Table 11 Actions and Schedule of Activity 1-1

Item	Action	Dec	Jan	Feb	Mar
Coordination with Municipalities	DWS takes responsibility of coordination with Municipalities in collaboration with SALGA.				
Un-visited/interviewed ten out of 51 targets	The Project Team will visit/interview them in January 2018.				
Collection of answers from 51 targets	The Project Team will complete it by the end of January 2018.				
Re-sending of questionnaires, reminding to 108 Municipalities and collection of answers	The Project Team will complete it by the end of January 2018.				
Data analysis (Activity 1-2)	The Project Team will complete it by March 2018.				

(2) Regular Assignment of Technical Member(s) to IBTC

While request-based technical members will be assigned continuously from DWS's headquarters such as the Directorates of Engineer Services and Water Use Efficiency, DWS will consider the possibility of regular assignment of personnel to be selected from participants in master degree courses abroad by DWS's Learning Academy (bursary) programme, who will return in March 2018.

2-4 Roles of Responsible Persons/Organization

[South African Side]

(1) Delay of Activity 1-1 (Baseline Survey)

To complete Activity 1-1 by January 2018, the South African side takes roles and responsibilities for necessary actions as shown below.

Table 12 Role and Responsibility in Activity 1-1

Item	Action	Persons in charge
Coordination with Municipalities	DWS takes responsibility of coordination with Municipalities in collaboration with SALGA.	Directorate of Water Use Efficiency and IBTC with necessary support from SALGA and JICA Experts
Un-visited/interviewed ten out of 51 targets	The Project Team will visit/interview them in January 2018.	The Project Team (divided into two teams) including JICA Experts
Collection of answers from 51 targets	The Project Team will complete it by the end of January 2018.	Directorate of Water Use Efficiency and IBTC with necessary support from JICA Experts.
Re-sending of questionnaires, reminding to 108 Municipalities and collection of answers	The Project Team will complete it by the end of January 2018.	Directorate of Water Use Efficiency and IBTC with necessary support from JICA Experts.
Data analysis (Activity 1-2)	The Project Team will complete it by March 2018.	Directorate of Water Use Efficiency and IBTC with necessary support from JICA Experts.

(2) Regular Assignment of Technical Member(s) to IBTC

As mentioned above, while DWS will assign request-based technical members continuously from DWS's headquarters such as the Directorates of Engineer Services and Water Use Efficiency, DWS will consider the possibility of regular assignment of personnel to be selected from participants in master degree courses abroad by DWS's Learning Academy (bursary) programme, who will return in March 2018.

[Japanese Side]

(1) Delay of Activity 1-1 (Baseline Survey)

To complete Activity 1-1 by January 2018, the Japanese side takes roles and responsibilities for necessary actions as shown in Table 11.

(2) Regular Assignment of Technical Member(s) to IBTC

The Japanese side will provide necessary supports and information for DWS to facilitate selection and assignment of technical members.

3 Modification of the Project Implementation Plan

3-1 Plan of Operation

In accordance with finalisation of project members, the South African members in charge and relevant partners in Plan of Operation (PO_1) were updated.

3-2 Other modifications on detailed implementation plan

None.

4 Preparation by the South African side toward after completion of the Project

To be considered.

II. Project Monitoring Sheet I & II (as attached)

Annex

Annex-1: List of Water Services Authorities and Water Board to be Visited/Interviewed
Annex-2: Location Map of Water Services Authorities and Water Board to be Visited/Interviewed
Annex-3: Results of Site Survey and Candidate Location of Training Yard in IBTC
Annex-4: Photos of the Project
Annex-5: Participants in Preparation of Project Monitoring Sheets

Abbreviations

DIRCO:	Department of International Relations and Cooperation
DWS:	Department of Water and Sanitation
EWSETA:	Energy and Water Sector Education and Training Authority
IBTC:	Infrastructure Branch Training Centre (under NWRI)
IWS:	International Water Support (a Branch of DWS)
JCC:	Joint Coordinating Committee
JICA:	Japan International Cooperation Agency
LGSETA:	Local Government Sector Education and Training Authority
NRW:	Non-Revenue Water
NWRI:	National Water Resources Infrastructure (a Branch of DWS)
PDM:	Project Design Matrix
PMU:	Programme Management Unit (a Branch of DWS)
PO:	Plan of Operations
P&I:	Planning and Information (a Branch of DWS)
SALGA:	South African Local Government Association
WSA:	Water Services Authority

Activities	Inputs		Important Assumption
Activities for Output 1 1-1. Conduct baseline survey on Skills Development in water supply sector (programme, human resources, materials and management). 1-2. Compile and analyze training resources, good practices, lessons learnt in water supply sector. 1-3. Share training resources, good practices, lessons learnt with SALGA and Municipalities. 1-4. Incorporate good practices into training materials. 1-5. Benchmark water supply services and its skills development in Japan. 1-6. Hold a seminar on the result of the baseline survey and benchmark.	**The South African Side** **1. Project Personnel** 1) JCC Chairperson: Chief Director of Global Cooperation, DWS 2) Project Director (PD): Director of NWRI, DWS 3) Co-Project Director (PD): SALGA 4) Project Manager (PM): Center Manager, IBTC 4) Training Manager, IBTC 6) Quality Assurer, IBTC 7) NRW Training Personnel, IBTC 8) Municipal Coordinator (Technical), SALGA 9) Municipal Coordinator (HRD), SALGA 10) TOT Facilitator 11) Candidate Facilitator 12) Other project personnel mutually agreed upon as necessary	**The Japanese Side** **1. JICA Experts** 1) Chief Advisor / NRW Management 2) Deputy Chief Advisor / NRW Management 3) Skills Programme Planning / Organization Coordination 4) Water Leakage Detection 5) Water Distribution Control / Commercial Loss 6) Training Yard Design and Supervision 7) Procurement / Administrative Coordination 8) Training Management / Human Resource Development 9) Other Expert(s) if necessary	**Pre-Conditions** - DWS and SALGA agree on their collaboration and cooperation for the Project - DWS allocates/ assigns personnel in charge of NRW Skills Programme at IBTC.
Activities for Output 2 2-1. Review roles and responsibility of IBTC for skills development of Municipalities in water supply sector based on the results of Output-1. 2-2. Draft proposed organogram of IBTC including NRW Training Section. 2-3. Prepare Terms of Reference for Training Sections related to skills development in water supply sector. 2-4. Prepare draft Standard Operating Procedures (SOP) of skills development provision. 2-5. Revise the SOP through the activities of Output-3. 2-6. Draft revised IBTC Strategic Business Model. 2-7. Conduct capacity assessment of IBTC's organization, individuals and facilitators developed.			
Activities for Output 3 3-1. Review situation/needs of skills development on NRW from the results of baseline survey of Activity 1-1. 3-2. Select registered Unit Standards related to NRW from existing qualifications of SAQA. 3-3. Design NRW Skills Programme consisting of the selected Unit Standards and supplementary items if any. 3-4. Select facilitators (qualified/skilled artisans on water reticulation or equivalent) for NRW Skills Programme from Municipalities and IBTC (DWS). 3-5. Schedule Training of Trainer (facilitator) (TOT), Assessors and Moderators for NRW Skills Programme at IBTC. 3-6. Develop training yard for NRW Skills Programme at IBTC. 3-7. Procure equipment, instruments/tools and materials for NRW Skills Programme at IBTC. 3-8. Develop training / learning materials for NRW Skills Programme at IBTC. 3-9. Conduct TOT by both JICA Experts and South African Facilitators for NRW Skills Programme at IBTC. 3-10. Develop NRW Skills Programme as an accredited programme by SETA. a) Apply for registration of facilitators of NRW Skills Programme as assessor/moderator/facilitator from SETA. b) Prepare Quality Management System of NRW Skills Programme at IBTC. c) Apply for accreditation of NRW Skills Programme to SETA. 3-11. Prepare Annual Plan of NRW Skills Programme including budget plan at IBTC. 3-12. Recruit participants from Municipalities through SALGA for NRW Skills Programme at IBTC. 3-13. Conduct trainings by South African Facilitators for NRW Skills Programme at IBTC. 3-14. Monitor implementation of NRW Skills Programme and feed the results back into Annual Plan and Programme. 3-15. Verify effects of NRW Skills Programme and provide necessary support by JICA Experts and IBTC in sampled Municipality(ies) if any.	**2. Land, Building and Facilities** 1) Office space and facilities for JICA Experts, including water, electricity, internet connection and air conditioners if necessary 2) Land for training yard 3) Other facilities mutually agreed upon as necessary **3. Local Cost** 1) Allowance, accommodation, travelling cost and foods for project personnel, facilitators and trainees in South Africa (born by DWS, Municipalities, etc.) 2. Administration and operational costs including cost for demurrage at local customs point and licensing of equipment/instruments if necessary 3. Other costs mutually agreed upon as necessary	**2. Facilities** 1) Training yard 2) Web Site Development and Maintenance 3) Other facilities mutually agreed upon as necessary **3. Equipment, instruments, tools and materials** 1) Portable ultrasonic water flow meter 2) Leak detection equipment/instruments 3) Tools for training 4) Materials such as pipe, fittings, valve, meter and etc. 5) Other equipment, instruments, tools and materials mutually agreed upon as necessary **4. Training** 1) Training in Japan 2) Training in the third country if necessary	

Issues & Countermeasures

(1) Delay of Activity 1-1 (Baseline Survey)

Issue

The Project selected 44 out of 152 municipalities as WSAs and seven water boards to be visited/interviewed through baseline survey (51 targets). The Project Team has visited/interviewed 36 municipalities and five water boards with questionnaire including spreadsheet (41 targets. 80% of all targets). However, the Project Team received answers from nine targets only, and questionnaire survey by email to other remaining 108 municipalities has been little progressed.

Countermeasures

DWS, particularly Directorate of Water Use Efficiency and IBTC, takes responsibility of coordination with Municipalities in collaboration with SALGA, then the Project Team will continue and complete the Activity by the end of January 2018.

(2) Routine Assignment of Technical Member(s) to IBTC

Issue

The Japanese side has requested a technical member(s) assigned to the Project at IBTC. Currently, request-based technical members have been assigned from DWS's headquarters such as Directorates of Engineer Services and Water Use Efficiency. However, in view of a concept of technical cooperation and sustainability of NRW Skills Programme at IBTC, the Japanese side expects a technical member(s) to be more involved routinely in the Project at IBTC for day-to-day technical transfer and communication with JICA Experts during the whole period of project implementation.

Countermeasures

While request-based technical members will be assigned continuously from DWS's headquarters, DWS will consider the possibility of routine assignment of personnel to be selected from participants in master degree courses abroad by DWS's Learning Academy (bursary) programme, who will return in March 2018.

Note: Indicators will be discussed and finalized based on the baseline survey at the beginning of the Project and be agreed at Joint Coordinating Committee (JCC)

Project Monitoring Sheet I (Revision of Project Design Matrix)

Project Title: Project for Strengthening the Training Capacity of IBTC on Non-Revenue Water
Project Period: August 2017 to July 2020 (36 months)
Implementing Organization: Department of Water and Sanitation (DWS) / IBTC
Dicrect Beneficiaries: DWS, IBTC and its personnel, Facilitators selected
Indicrect Beneficiaries: Municipalities
End Beneficiaries: Customers / Consumers of water supplied by Municipalities
Project Site: Gauteng Province

Version 1
Dated 17 Aug. 2017

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
<Overall Goal>					
Non-Revenue Water (NRW) skills development for Municipalities are continuously conducted under the IBTC's direction in collaboration with SALGA.	1. Actual trainings in IBTC (No. of trainings / trades or skills) 2. IBTC organization/individual performance (degree/status) 3. Programmes planned in Strategic Business Model (trades or skills) 4. Actual trainings of NRW in Municipalities (No. of training)	1&4. Annual Training Report 2. Capacity Assessment Report 3. IBTC Strategic Business Model		None (as planned)	
<Project Purpose>					
NRW Skills Programme is continuously provided at IBTC, based on organizational and technical needs.	1. Actual trainings (No. of trainings / trades or skills) 2. IBTC organization/individual performance / capacity 3. Programmes planned in Strategic Business Model (trades or skills) 4. Status of accreditation of NRW Unit Standards applied to SETA	1. Annual Training Report 2. Capacity Assessment Report 3. IBTC Strategic Business Model 4. SETA Accreditation Certificate	- Dramatic reduction of budget and public grants on skills development for Municipalities does not happen.	None (as planned)	
<Outputs>					
1. Training information on water supply sector is accumulated at IBTC and shared with SALGA and Municipalities.	1-1. List of training resources (by providers, programmes, human resources, manuals, subsidies/grants, etc.) 1-2. Benchmarked matrix (summary) of Japan and South Africa on water services (comparative features, strength/weakness, methodology, etc.)	1-1. Baseline Survey Report 1-2. Benchmark Report		None (as planned)	
2. IBTC's training management capacity in water supply sector is improved.	2-1. IBTC organization/individual performance / capacity 2-2. Progress of Organizational setting update 2-3. Record of SOPs (actual revisions) 2-4. Progress of update of IBTC Strategic Business Model	2-1. Capacity Assessment Report 2-2. Proposed Organogram of IBTC 2-3. Standard Operating Procedure (SOP) 2-4. Draft revised IBTC Strategic Business Model		None (as planned)	
3. IBTC's training management capacity in water supply sector is improved.	3-1. Actual trainings on NRW Skills Programme (No. of trainings, trainees) 3-2. Appropriateness of NRW Skills Programme (trainees' evaluation) 3-3. Utilization of IBTC's skills training at sampled Municipality(ies)	3-1. IBTC Annual Report 3-2. Training evaluation questionnaire to trainees 3-3. Survey report in sampled Municipality(ies)		None (as planned)	

Note:

Project Monitoring Sheet II (Revision of Plan of Operation)

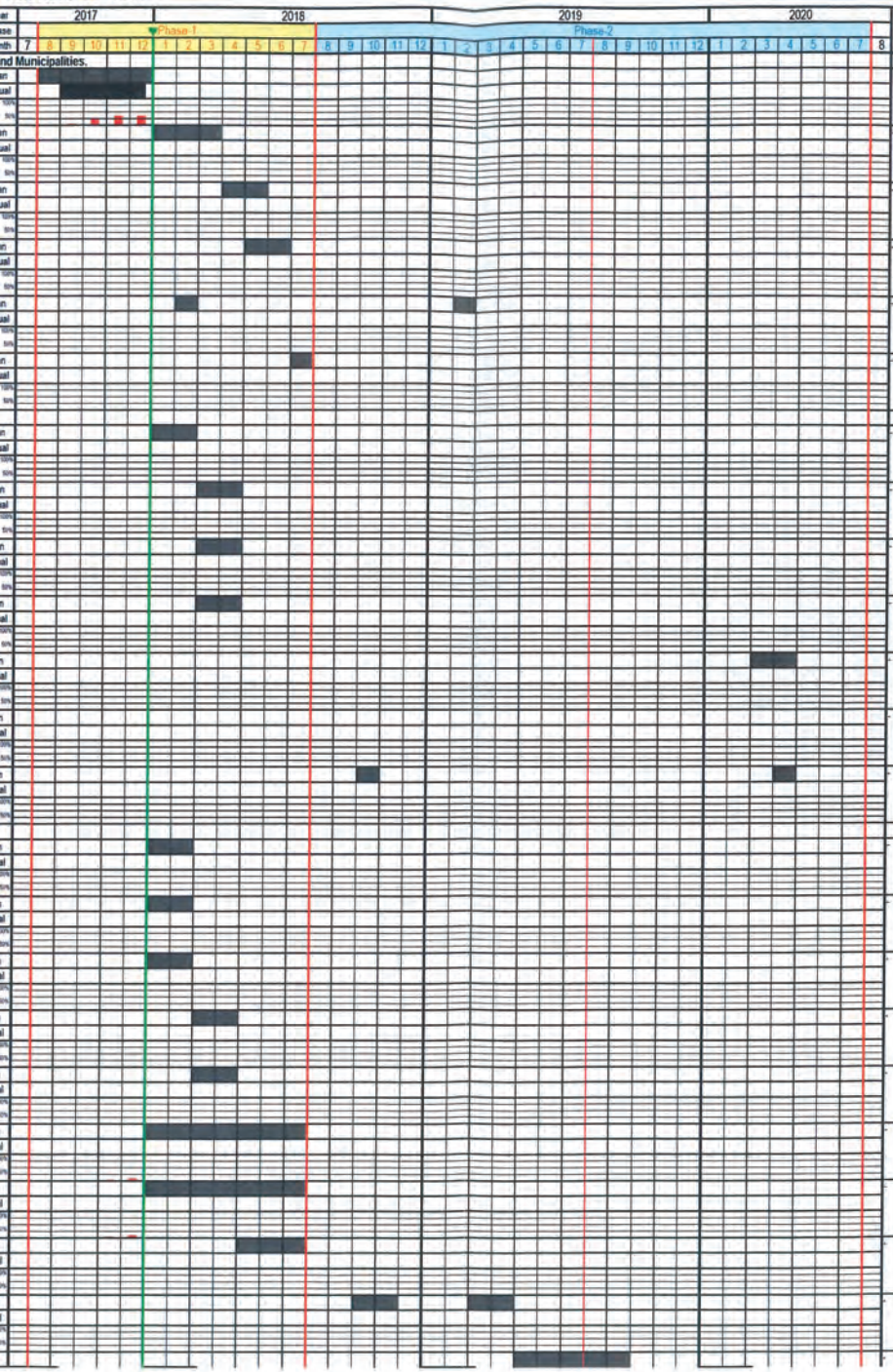
PO1

Version 1

Dated 17 Aug. 2017

Project Title: Project for Strengthening the Training Capacity of IBTC on Non-Revenue Water

Activities	Remarks	Monitoring: Achievement	Monitoring: Issues & Countermeasures	SA Members in charge: Responsible Organization	SA Members in charge: Responsible Person	SA Members in charge: Implementor	Relevant Partners
Output 1: Training information on water supply sector is accumulated at IBTC and shared with SALGA and Municipalities.							
1-1 Conduct baseline survey on Skills Development in water supply sector (programme, human resources, materials and management). Progress: 30% Behind 1.0 month	-	41 out of 51 targets (80%) were visited/interviewed with questionnaire including spreadsheet.	Only nine targets answered, and questionnaire survey by email has been little progressed. See the Summary "2. Delay of Work Schedule and/or Problems".	NWRI, SALGA	IBTC(Rosa), WUE(Masike), SALGA(William)	IBTC, WUE, SALGA	WBs, WSAs, SETAs, WRC, TVET
1-2 Compile and analyze training resources, good practices, lessons learnt in water supply sector. Progress: 00% Behind 0.0 month	-	None (as planned)	-	NWRI, SALGA	IBTC(Rosa), WUE(Masike), SALGA(William)	IBTC, WUE, SALGA	
1-3 Share training resources, good practices, lessons learnt with SALGA and Municipalities. Progress: 00% Behind 0.0 month	-	None (as planned)	-	NWRI, SALGA	IBTC(Rosa), WUE(Masike), SALGA(William)	IBTC, WUE, SALGA	WB, WSAs, WRC
1-4 Incorporate good practices into training materials. Progress: 00% Behind 0.0 month	-	None (as planned)	-	NWRI, SALGA	IBTC(Rosa), WUE(Masike), SALGA(William)	IBTC, WUE, SALGA	
1-5 Benchmark water supply services and its skills development in Japan. Progress: 00% Behind 0.0 month	-	None (as planned)	-	DWS, SALGA	DWS, SALGA	DWS, SALGA	WSAs, SETAs, Univ.
1-6 Hold a seminar on the result of the baseline survey and benchmark. Progress: 00% Behind 0.0 month	-	None (as planned)	-	NWRI, SALGA	IBTC(Rosa), WUE(Masike), SALGA(William)	IBTC, WUE, SALGA	WBs, WSAs, SETAs, WRC, TVET, Univ.
Output 2: IBTC's training management capacity in water supply sector is improved.							
2-1 Review roles and responsibility of IBTC for skills development of Municipalities in water supply sector based on the results of Output-1. Progress: 00% Behind 0.0 month	-	None (as planned)	-	NWRI, HRD	IBTC(Rosa), HRD(**)	IBTC, HRD	WUE, SALGA, WBs
2-2 Draft proposed organogram of IBTC including NRW Training Section. Progress: 00% Behind 0.0 month	-	None (as planned)	-	NWRI, OD	IBTC(Rosa), OD(**)	IBTC, OD	WUE, SALGA, WBs
2-3 Prepare Terms of Reference for Training Sections related to skills development in water supply sector. Progress: 00% Behind 0.0 month	-	None (as planned)	-	DWS	OS(Kenibe)	IBTC, WSLG	NWRI, WUE, SALGA, SETAs, WRC, WBs
2-4 Prepare draft Standard Operating Procedures (SOP) of skills development provision. Progress: 00% Behind 0.0 month	-	None (as planned)	-	IBTC	IBTC(Lerato)	IBTC	WUE, HRD, OS
2-5 Revise the SOP through the activities of Output-3. Progress: 00% Behind 0.0 month	-	None (as planned)	-	IBTC	IBTC(Lerato)	IBTC	WUE, HRD, OS
2-6 Draft revised IBTC Strategic Business Model. Progress: 00% Behind 0.0 month	-	None (as planned)	-	NWRI	IBTC(Rosa)	IBTC	WUE, HRD, CP, SALGA
2-7 Conduct capacity assessment of IBTC's organization, individuals and facilitators developed. Progress: 00% Behind 0.0 month	-	None (as planned)	-	NWRI, HRD, OD	IBTC(Rosa), SALGA(William)	IBTC, SALGA	WUE, WBs, WSAs
Output 3: Trainings on Non-Revenue Water (NRW) are conducted at IBTC.							
3-1 Review situation/needs of skills development on NRW from the results of baseline survey of Activity 1-1. Progress: 00% Behind 0.0 month	-	None (as planned)	-	NWRI, SALGA	IBTC(Rosa), WUE(Masike), SALGA(William)	IBTC, WUE, SALGA	WBs, WSAs, SETAs, WRC, TVET
3-2 Select registered Unit Standards related to NRW from existing qualifications of SAQA. Progress: 00% Behind 0.0 month	-	None (as planned)	-	IBTC, WUE, OS, HRD, SALGA	IBTC(Rosa), WUE (Masike), OS(**), HRD(**), SALGA(William)	IBTC, WUE, OS, HRD, SALGA	WBs, WSAs, SETAs
3-3 Design NRW Skills Programme consisting of the selected Unit Standards and supplementary items if any. Progress: 00% Behind 0.0 month	-	None (as planned)	-	IBTC, WUE, OS, HRD, SALGA	IBTC(Rosa), WUE (Masike), OS(**), HRD(**), SALGA(William)	IBTC, WUE, OS, HRD, SALGA	WBs, WSAs, SETAs
3-4 Select facilitators (qualified/skilled artisans on water reticulation or equivalent) for NRW Skills Programme from Municipalities and IBTC(DWS). Progress: 00% Behind 0.0 month	-	None (as planned)	-	NWRI, SALGA	IBTC(Rosa), WUE(Masike), SALGA(William)	IBTC, WUE, SALGA	WBs, WSAs, SETAs
3-5 Schedule Training of Trainer (facilitator) (TOT), Assesors and Moderators for NRW Skills Programme at IBTC. Progress: 00% Behind 0.0 month	-	None (as planned)	-	NWRI, SALGA	IBTC(Rosa), WUE(Masike), SALGA(William)	IBTC, WUE, SALGA	WBs, WSAs, SETAs
3-6 Develop training yard for NRW Skills Programme at IBTC. Progress: 10% Behind 0.0 month	-	Ahead of schedule, preliminary design is ongoing. Site survey was done.	-	NWRI, SALGA	NWRI(Moonsi), IBTC (Rosa), WUE (Masike), SALGA(William)	NWRI, IBTC, WUE	WBs, WSAs
3-7 Procure equipment, instruments/tools and materials for NRW Skills Programme at IBTC. Progress: 10% Behind 0.0 month	-	Ahead of schedule, preliminary survey is ongoing. Site survey was done.	-	NWRI, SALGA	NWRI(Moonsi), IBTC (Rosa), WUE (Masike), SALGA(William)	NWRI, IBTC, WUE	WBs, WSAs
3-8 Develop training / learning materials for NRW Skills Programme at IBTC. Progress: 00% Behind 0.0 month	-	None (as planned)	-	OS, HRD, IBTC, WUE, SALGA	OS(**), HRD(**), IBTC(Rosa), WUE(Masike), SALGA(William)	OS, HRD, IBTC, WUE	WBs, WSAs
3-9 Conduct TOT by both JICA Experts and South African Facilitators for NRW Skills Programme at IBTC. Progress: 00% Behind 0.0 month	-	None (as planned)	-	NWRI, SALGA	IBTC(Rosa), WUE(Masike), SALGA(William)	IBTC, WUE, SALGA	WBs, WSAs, SETAs
3-10 Develop NRW Skills Programme as an accredited programme by SETA.	-	None (as planned)	-	OS, HRD, IBTC,	OS(**), HRD(**),	OS, HRD, IBTC,	SETAs



Project Monitoring Sheet II (Revision of Plan of Operation)

PO1

Version 1
Dated 17 Aug. 2017

Project Title: Project for Strengthening the Training Capacity of IBTC on Non-Revenue Water

Activities	Year / Phase / Month	Remarks	Monitoring: Achievement	Monitoring: Issues & Countermeasures	SA Members in charge: Responsible Organization	SA Members in charge: Responsible Person	SA Members in charge: Implementor	Relevant Partners
	Actual (Progress: 00% Behind 0.0 month)				WUE	IBTC(Rosa), WUE(Masiko), SALGA(William)	WUE	
3-10a. Apply for registration of facilitators of NRW Skills Programme as assessor/moderator/facilitator from SETA.	Plan	-	None (as planned)	-	Ditto	Ditto	Ditto	SETAs
	Actual							
3-10b. Prepare Quality Management System of NRW Skills Programme at IBTC.	Plan	-	None (as planned)	-	Ditto	Ditto	Ditto	SETAs
	Actual							
3-10c. Apply for accreditation of NRW Skills Programme to SETA.	Plan	-	None (as planned)	-	Ditto	Ditto	Ditto	SETAs
	Actual							
3-11 Prepare Annual Plan of NRW Skills Programme including budget plan at IBTC.	Plan	-	None (as planned)	-	NWRI, HRD	IBTC(Rosa), WUE(Masiko), HRD(**)	IBTC, WUE, HRD	SALGA
	Actual (Progress: 00% Behind 0.0 month)							
3-12 Recruit participants from Municipalities through SALGA for NRW Skills Programme at IBTC.	Plan	-	None (as planned)	-	IBTC, WUE, SALGA	IBTC(Rosa), WUE(Masiko), SALGA(William)	IBTC, WUE, SALGA	WBs, WSAs
	Actual (Progress: 00% Behind 0.0 month)							
3-13 Conduct trainings by South African Facilitators for NRW Skills Programme at IBTC.	Plan	-	None (as planned)	-	IBTC, WUE, SALGA	IBTC(Rosa), WUE(Masiko), SALGA(William)	IBTC, WUE, SALGA	WBs, WSAs
	Actual (Progress: 00% Behind 0.0 month)							
3-14 Monitor implementation of NRW Skills Programme and feed the results back into Annual Plan and Programme.	Plan	-	None (as planned)	-	IBTC, WUE, SALGA	IBTC(Rosa), WUE(Masiko), SALGA(William)	IBTC, WUE, SALGA	WBs, WSAs
	Actual (Progress: 00% Behind 0.0 month)							
3-15 Verify effects of NRW Skills Programme and provide necessary support by JICA Experts and IBTC in sampled Municipality(ies) if any.	Plan	-	None (as planned)	-	IBTC, WUE, SALGA	IBTC(Rosa), WUE(Masiko), SALGA(William)	IBTC, WUE, SALGA	WBs, WSAs, SETAs
	Actual (Progress: 00% Behind 0.0 month)							

Project Monitoring Sheet II (Revision of Plan of Operation)

PO1

Version 1

Dated 17 Aug. 2017

Project Title: Project for Strengthening the Training Capacity of IBTC on Non-Revenue Water

Activities	Remarks	Monitoring: Achievement	Monitoring: Issues & Countermeasures	SA Members in charge: Responsible Organization	SA Members in charge: Responsible Person	SA Members in charge: Implementor	Relevant Partners
Input							
Experts							
①-1 Chief Advisor / NRW Management Akinori MIYOSHI — Plan	-	1.87 month	-	DWS, SALGA	IBTC, WUE, SALGA	IBTC, WUE, SALGA	WBs, WSAs, SETAs
①-1 Chief Advisor / NRW Management Akinori MIYOSHI — Actual							
①-2 Deputy-Chief Advisor / NRW Management Taketoshi FUJIYAMA — Plan	-	0.97 month	-	DWS, SALGA	IBTC, WUE, SALGA	IBTC, WUE, SALGA	WBs, WSAs, SETAs
①-2 Deputy-Chief Advisor / NRW Management Taketoshi FUJIYAMA — Actual							
②Skills Programme Planning / Organization Coordination Kenichiro SUGIYA — Plan	-	1.83 month	-	DWS, SALGA	IBTC, WUE, SALGA	IBTC, WUE, SALGA	WBs, WSAs, SETAs
②Skills Programme Planning / Organization Coordination Kenichiro SUGIYA — Actual							
③Water Leakage Detection Hiroki NIIMURA — Plan	-	1.00 month	-	DWS, SALGA	IBTC, WUE, SALGA	IBTC, WUE, SALGA	WBs, WSAs, SETAs
③Water Leakage Detection Hiroki NIIMURA — Actual							
④Water Distribution Management / Commercial Loss Hiroyuki MORITA — Plan	-	0.00 month	-	DWS, SALGA	IBTC, WUE, SALGA	IBTC, WUE, SALGA	WBs, WSAs, SETAs
④Water Distribution Management / Commercial Loss Hiroyuki MORITA — Actual							
⑤Training Yard Design and Supervision Masuji IDE — Plan	-	1.30 month	-	DWS, SALGA	IBTC, WUE, SALGA	IBTC, WUE, SALGA	WBs, WSAs, SETAs
⑤Training Yard Design and Supervision Masuji IDE — Actual							
⑥Procurement / Administrative Coordination Toshinonbu KASUYA — Plan	-	1.60 month	-	DWS, SALGA	IBTC, WUE, SALGA	IBTC, WUE, SALGA	WBs, WSAs, SETAs
⑥Procurement / Administrative Coordination Toshinonbu KASUYA — Actual							
Long-Term Expert							
⑦Training Management / Capacity Development — Plan	-	2.50 month	-	DWS, SALGA	IBTC, WUE, SALGA	IBTC, WUE, SALGA	WBs, WSAs, SETAs
⑦Training Management / Capacity Development — Actual							
Equipment Procurement							
Equipment for Water Leakage Detection — Plan	-	None (as planned)	-	NWRI, SALGA	NWRI(Nawa), IBTC (Rosa), WUE(Masiko), SALGA(Willem)	NWRI, IBTC, WUE	WBs, WSAs
Equipment for Water Leakage Detection — Actual							
National Consultant/Contractor							
Training Yard Construction — Plan	-	None (as planned)	-	NWRI, SALGA	NWRI(Nawa), IBTC (Rosa), WUE(Masiko), SALGA(Willem)	NWRI, IBTC, WUE	WBs, WSAs
Training Yard Construction — Actual							
Web Site Development and Maintenance — Plan	-	None (as planned)	-	DWS	IBTC(Rosa), WUE(Mashia)	IBTC, WUE	SALGA
Web Site Development and Maintenance — Actual							
Training in Japan							
Phase-1 Training in Japan (for Managerment / Decision Making Level) — Plan	Rescheduled to April 2018. Participants will be selected by Dec. 2017.	None (as planned)	-	DWS, SALGA	DWS, SALGA	DWS, SALGA	WSAs, SETAs, Univ.
Phase-1 Training in Japan (for Managerment / Decision Making Level) — Actual							
Phase-2 Training in Japan (for Candidate Facilitators / Working Level) — Plan	-	None (as planned)	-	DWS, SALGA	DWS, SALGA	DWS, SALGA	WBs, WSAs
Phase-2 Training in Japan (for Candidate Facilitators / Working Level) — Actual							
Monitoring							
Monitoring							
Joint Coordination Committee — Plan	-	Kick-off meeting and 1st JCC meeting	-	DWS, SALGA	DWS, SALGA	IWS, SALGA	DIRCO, WBs, WSAs, SETAs
Joint Coordination Committee — Actual							
Set-up the Detailed Plan of Operation — Plan	-	Kick-off	-	IBTC, WUE, SALGA	IBTC(Rosa), WUE(Masiko), SALGA(Willem)	IBTC, WUE, SALGA	JCC members
Set-up the Detailed Plan of Operation — Actual							
Submission of Monitoring Sheet — Plan	-	Ver.0 and Ver.1	-	IBTC, WUE, SALGA	IBTC(Rosa), WUE(Masiko), SALGA(Willem)	IBTC, WUE, SALGA	JCC members
Submission of Monitoring Sheet — Actual							
Monitoring Mission from Japan — Plan	-	Kick-off	-	DWS	DWS	IWS	SALGA, DIRCO
Monitoring Mission from Japan — Actual							
Joint Monitoring — Plan	-	Ver.0 and Ver.1	-	DWS, SALGA	DWS, SALGA	DWS, SALGA	-
Joint Monitoring — Actual							
Post Monitoring — Plan	-	-	-	DWS, SALGA	DWS, SALGA	DWS, SALGA	-
Post Monitoring — Actual							
Reports/Documents							
Project Progress Report — Plan	-	None (as planned)	-	DWS, SALGA	DWS, SALGA	DWS, SALGA	-
Project Progress Report — Actual							
Project Completion Report — Plan	-	None (as planned)	-	DWS, SALGA	DWS, SALGA	DWS, SALGA	-
Project Completion Report — Actual							
Project Brief Note — Plan	-	None (as planned)	-	DWS, SALGA	DWS, SALGA	DWS, SALGA	-
Project Brief Note — Actual							
Public Relations							
Web Site — Plan	-	None (as planned)	-	DWS	IBTC(Rosa), WUE(Masiko)	IBTC, WUE	SALGA
Web Site — Actual							
Press Release, Press Conference, Public Relations Magazine, Newsletter — Plan	-	-	-	DWS, SALGA	DWS, SALGA	DWS, SALGA	-
Press Release, Press Conference, Public Relations Magazine, Newsletter — Actual							

Annex-1

List of Water Services Authorities to be Visited/Interviewed

No	Prov.	Name	Municipality		Visit/ Interview	Questionnaire Collection
			Type	Classification		
1	EC	Amathole	DM	C2	Done	No
2	EC	Buffalo City	Metro	A	Done	Done
3	EC	Kouga	LM	B3	Done	No
4	EC	Nelson Mandela Bay	Metro	A	Done	No
5	EC	OR Tambo	DM	C2	Done	No
6	FS	Mangaung	Metro	A	Done	No
7	FS	Matjabeng	LM	B1	Done	Done
8	FS	Metsimaholo	LM	B2	No	No
9	FS	Moqhaka	LM	B2	Done	No
10	GP	City of Johannesburg	Metro	A	Done	No
11	GP	City of Tshwane	Metro	A	Done	Done
12	GP	Ekurhuleni	Metro	A	Done	No
13	GP	Emfuleni	LM	B1	Done	No
14	GP	Mogale City	LM	B1	Done	No
15	KZN	Amajuba	DM	C2	No	No
16	KZN	Ethekwini	Metro	A	Done	Done
17	KZN	Msunduzi	LM	B1	Done	No
18	KZN	Newcastle	LM	B1	No	No
19	KZN	Ugu	DM	C2	Done	Done
20	KZN	Umgungundlovu	DM	C2	Done	No
21	KZN	uMhlathuze	LM	B1	Done	No
22	KZN	King Cetshwayo (formerly uThungulu)	DM	C2	Done	No
23	LP	Greater Sekhukhune	DM	C2	No	No
24	LP	Lephalale	LM	B3	Done	Done
25	LP	Polokwane	LM	B1	Done	No
26	MP	Govan Mbeki	LM	B1	Done	No
27	MP	Mbombela	LM	B1	Done	Done
28	MP	Steve Tshwete	LM	B1	Done	No
29	MP	Victor Khanye	LM	B3	Done	No
30	NC	Sol Plaatje	LM	B1	Done	Done
31	NC	Umsobomvu	LM	B3	Done	No
32	NW	Ngaka Modiri Molema	DM	C2	Done	No
33	NW	Matlosana	LM	B1	Done	Done
34	NW	Rustenburg	LM	B1	Done	No
35	NW	Tlokwe (merged into Tlokwe/Ventersdorp)	LM	B1	No	No
36	WC	City of Cape Town	Metro	A	Done	No
37	WC	Drakenstein	LM	B1	Done	No
38	WC	George	LM	B1	No	No
39	WC	Knysna	LM	B2	No	No
40	WC	Mossel Bay	LM	B2	No	No
41	WC	Stellenbosch	LM	B1	Done	No
42	WC	Langeberg	LM	B3	Done	No
43	WC	Breede Valley	LM	B2	Done	No
44	WC	Witzenberg	LM	B3	Done	No

Remarks: Classification of Municipalities is as below:

Metro	A	- Largest cities or metros - Metropolitan municipalities
LM	B1	- Secondary cities; those with next largest budgets - Local municipalities with a large town or city as its urban core
	B2	- Municipalities with a large town as core - Local municipality with a medium town or towns as its urban core
	B3	- Relatively small population, significant proportion of urban population, but with no large town as core - Local municipality with a small town or towns as its urban core
	B4	- Municipalities which are mainly rural with, at most, 1 or 2 small towns - Local municipality with no urban core
DM	C1	- DM: District municipalities that are not WSAs
	C2	- DM: District municipalities that are WSAs

List of Water Board to be Visited/Interviewed

No	Prov.	Name	Municipality		Visit/ Interview	Questionnaire Collection
			Type	Classification		
1	EC	Amatola Water	-	-	Done	No
2	FS	Bloem Water	-	-	Done	No
3	LP	Lepelle Northern Water	-	-	Done	No
4	NW	Magalies Water	-	-	Done	No
5	KZN	Mhlathuze Water	-	-	Done	No
6	WC	Overberg	-	-	No	No
7	GP	Rand Water	-	-	No	Done

Annex-2

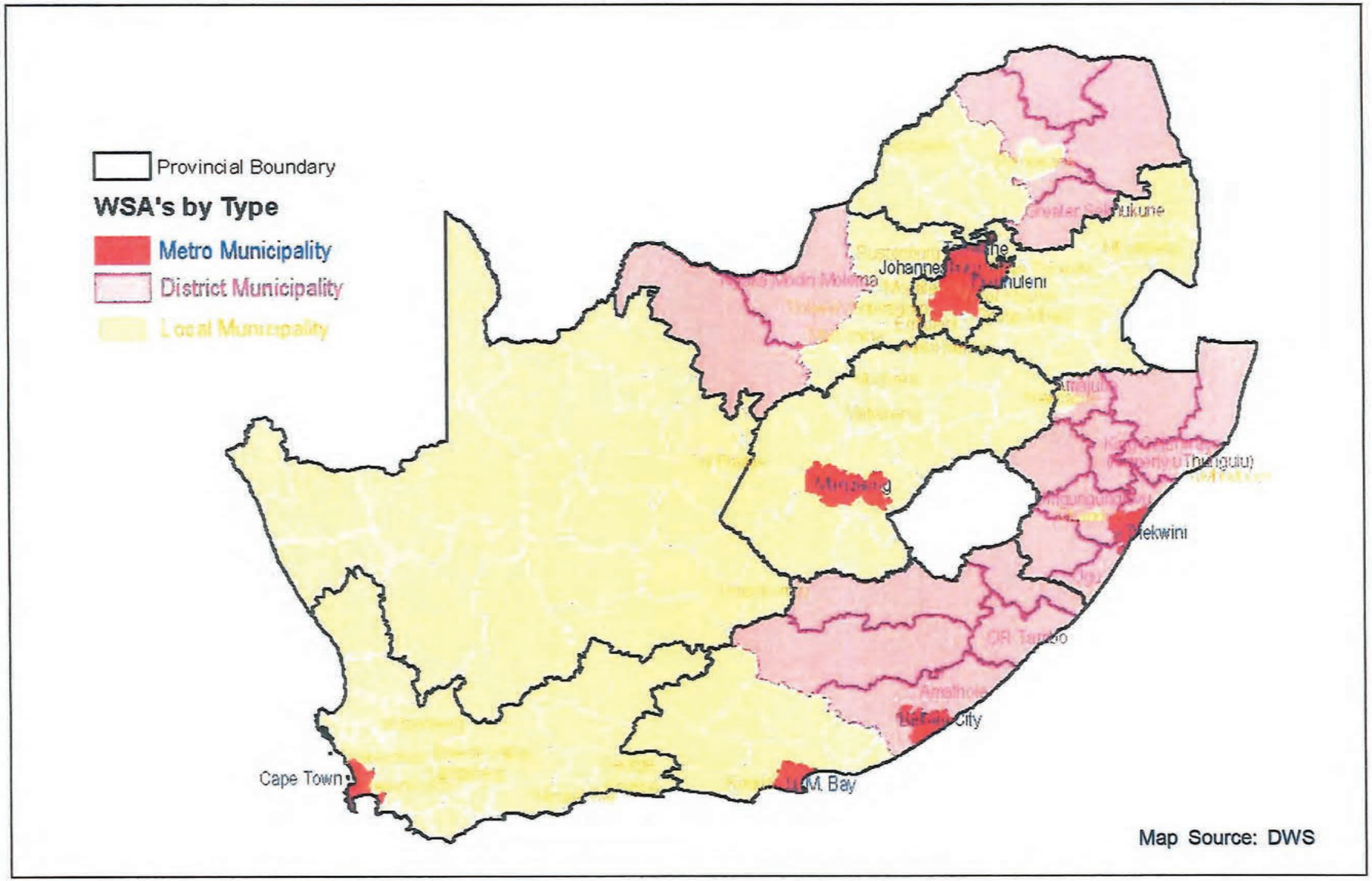


Figure. Target Water Services Authorities (44 out of 152) to be Visited/Interviewed through Baseline Survey

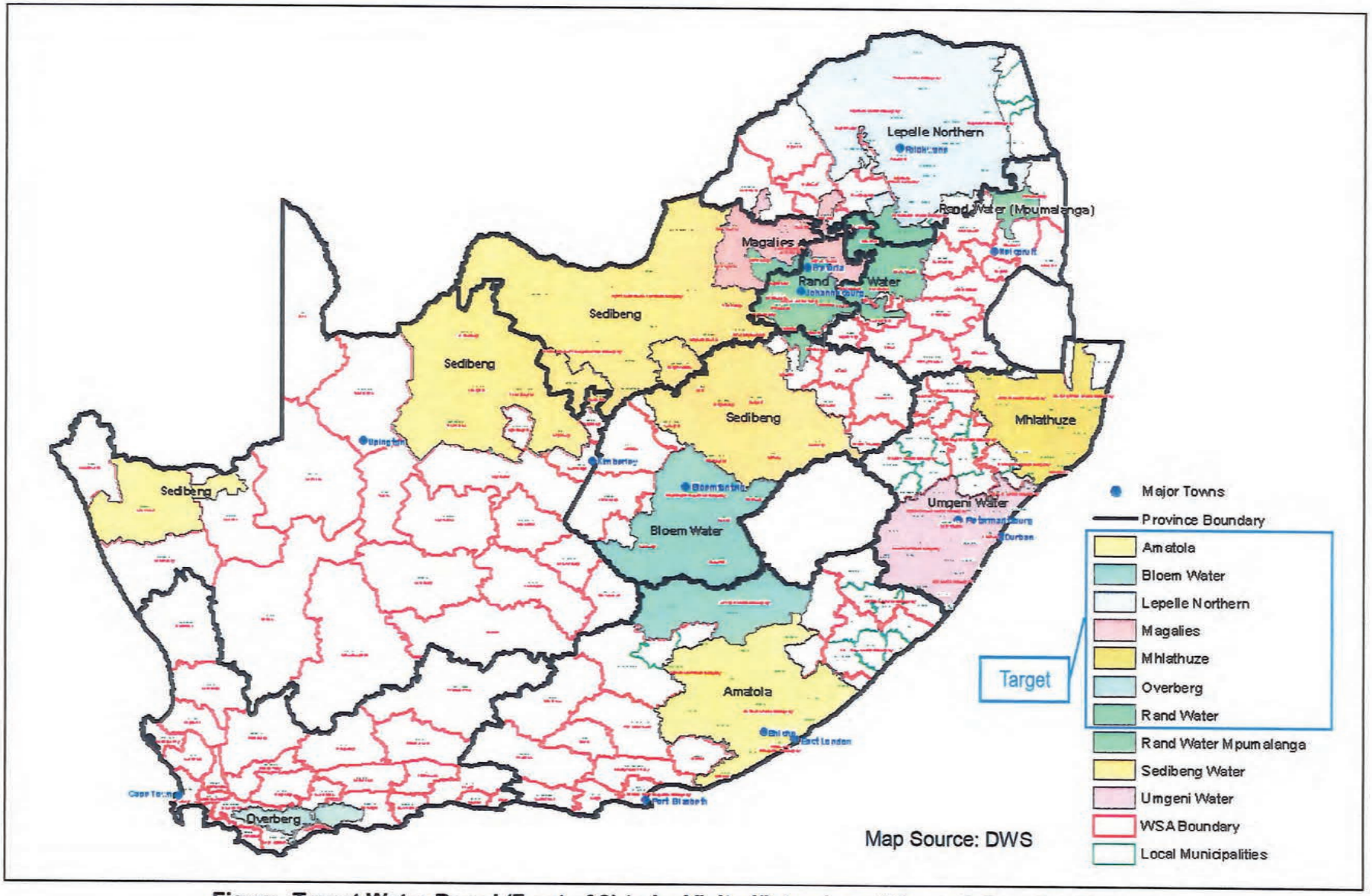


Figure. Target Water Board (7 out of 9) to be Visited/Interviewed through Baseline Survey

Annex-3

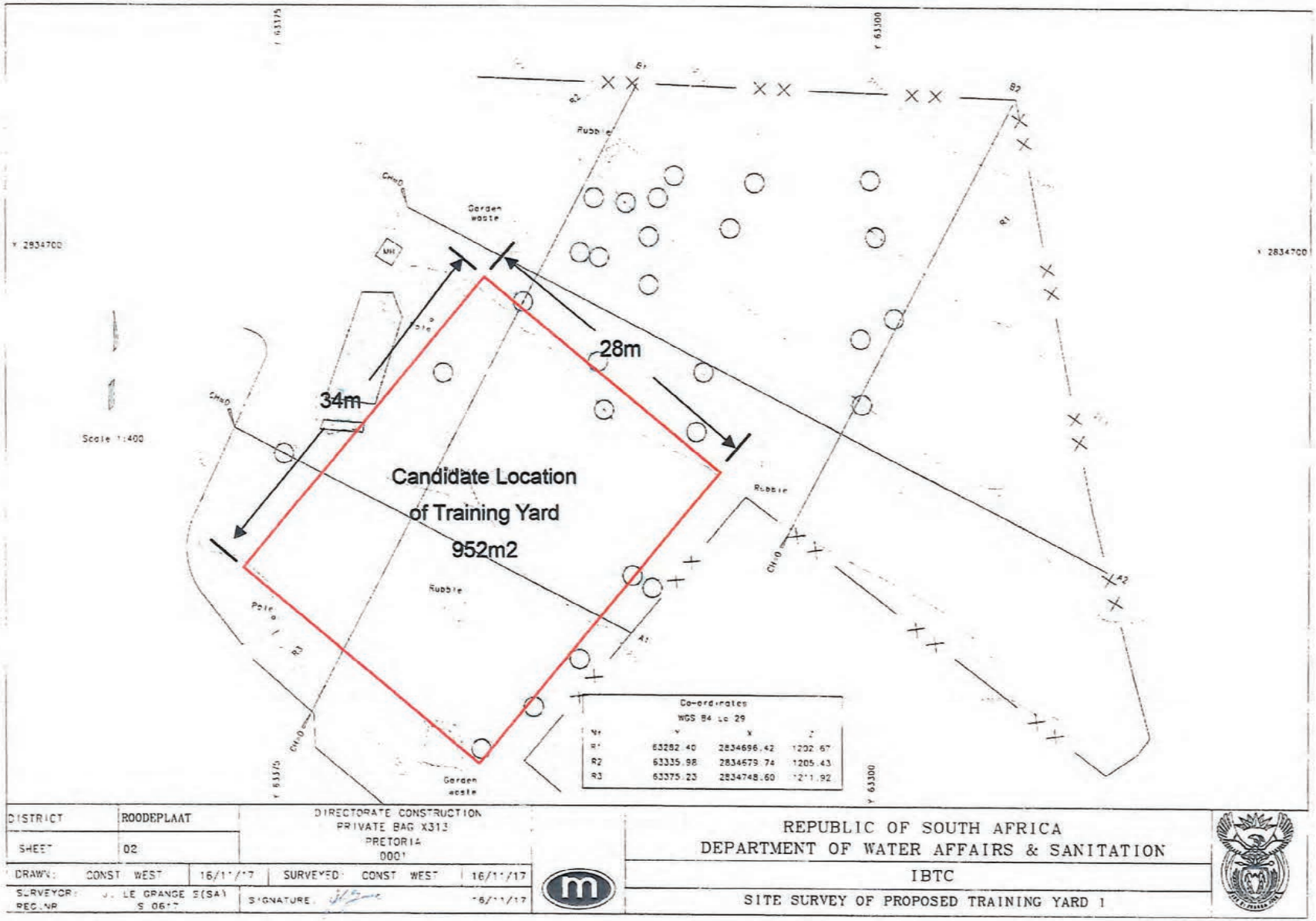
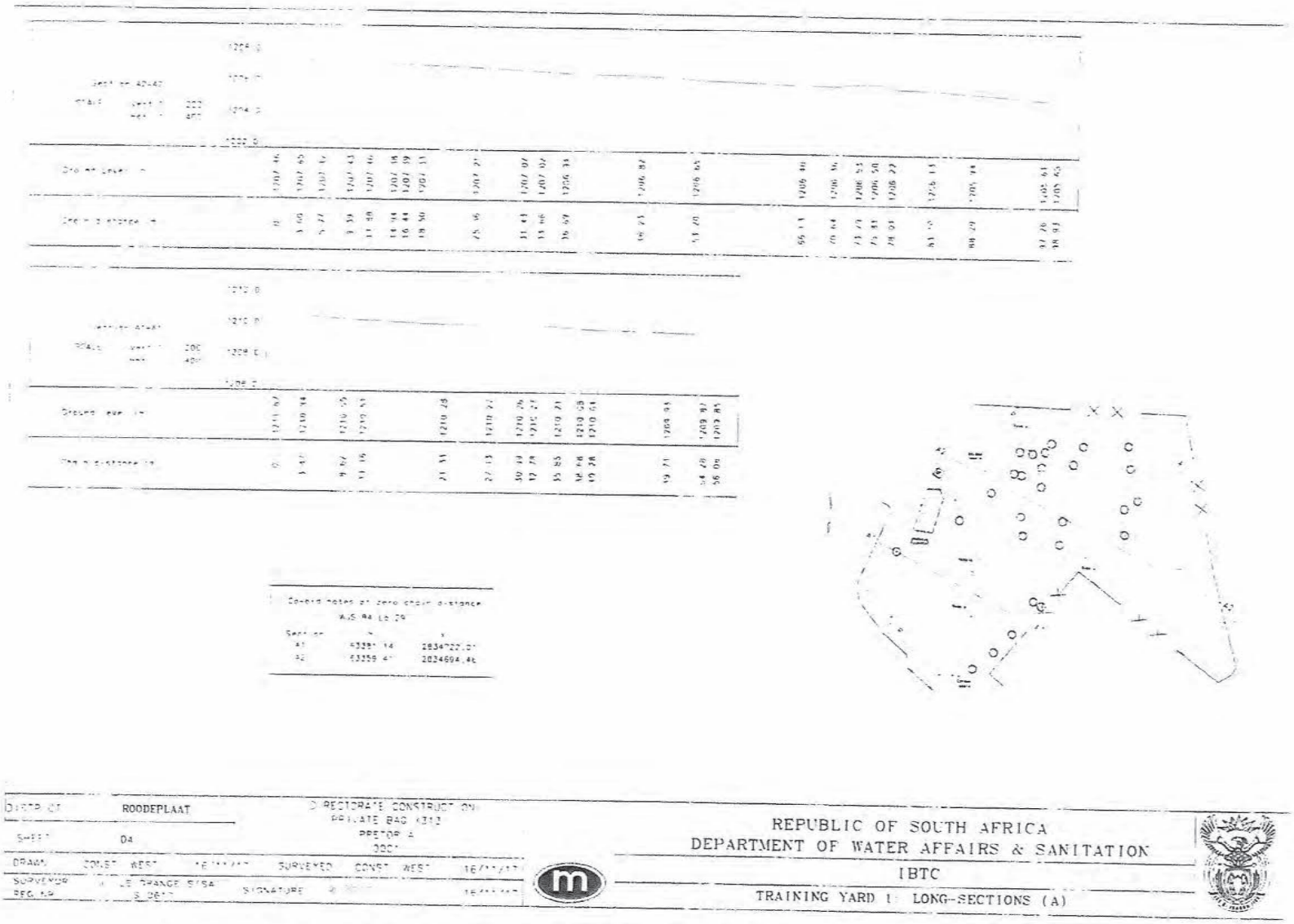


Figure. Results of Site Survey and Candidate Location of Training Yard in IBTC (1/3)



DISTRICT	ROODEPLAAT
SHEET	04
DRAWN	CONST WEST
SURVEYED	CONST WEST
SURVEYOR	
REG NO	
SIGNATURE	

DIRECTORATE CONSTRUCTION
PRIVATE BAG X313
PRETORIA
0001

REPUBLIC OF SOUTH AFRICA
DEPARTMENT OF WATER AFFAIRS & SANITATION
IBTC
TRAINING YARD 1 LONG-SECTIONS (A)

Figure. Results of Site Survey and Candidate Location of Training Yard in IBTC (2/3)

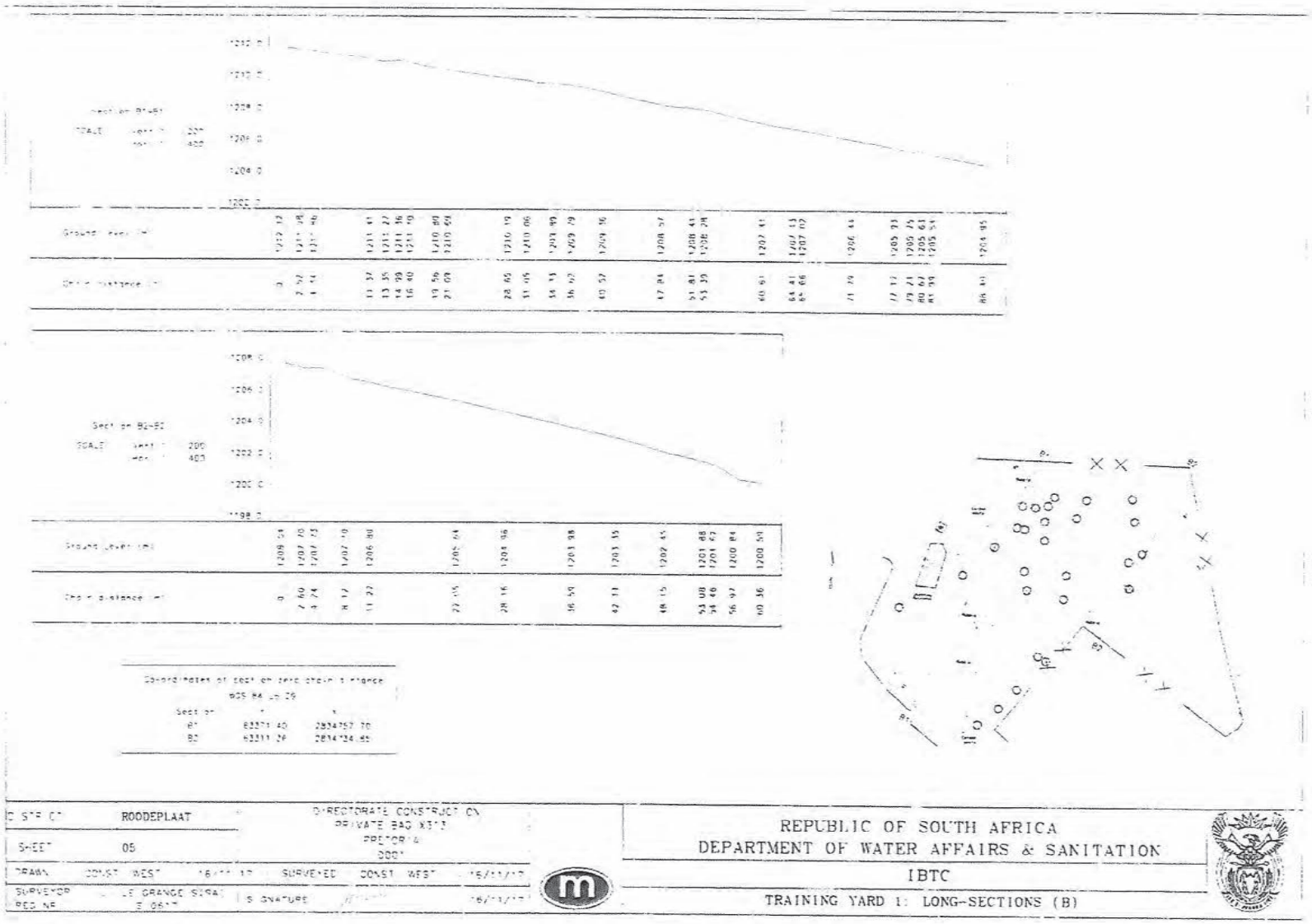


Figure. Results of Site Survey and Candidate Location of Training Yard in IBTC (3/3)

Photos of the Project (August 2017)

Photo-1 Mini-Workshop for Kick-off

Photo-2 Preparation of Project Monitoring Sheets (Ver. 0)

Photo-3 Project Kick-off Meeting

Photo-4 Project Kick-off Meeting

Photo-5 Project Kick-off Meeting (JICA Technical Cooperation)

Photo-6 Project Kick-off Meeting (Relevant Organizations)

Photo-7 IBTC Tour after Project Kick-off Meeting

Photo-8 Visiting Water Treatment Plant of Tshwane Metro

Photos of the Project (September 2017)

Photo-1 Discussion about Baseline Survey

Photo-2 Project Explanation to EWSETA

Photo-3 Project Explanation to LGSETA

Photo-4 Project Explanation to LGSETA

Photo-5 Temporary Project Office in IBTC

Photo-6 Temporary Project Office in IBTC

Photos of the Project (October 2017)

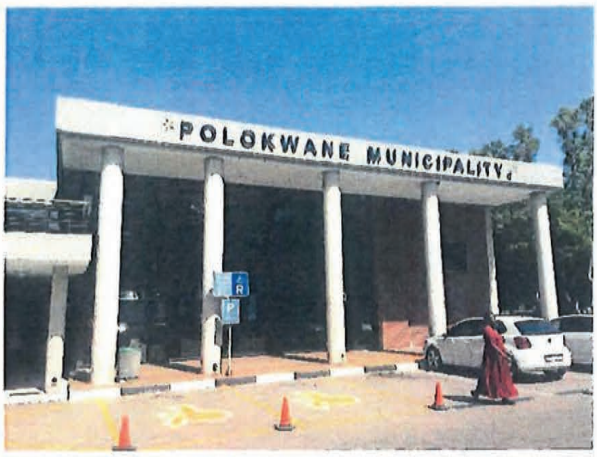


Photo-1 Baseline Survey to Polokwane LM (Limpopo)

Photo-2 Baseline Survey to Sol Plaatje LM (Northern Cape)

Photo-3 Baseline Survey to Kouga LM (Eastern Cape)

Photo-4 Baseline Survey to N. Mandela Bay Metro (Eastern Cape)

Photo-5 Baseline Survey to Baffalo City Metro (Eastern Cape)

Photo-6 Baseline Survey to Amathole DM (Eastern Cape)

Photo-7 Candidate Location (North) of Training Yard in IBTC

Photo-8 Candidate Location (South) of Training Yard in IBTC

Photos of the Project (November 2017)

Photo-1 Baseline Survey to Steve Tshwete LM (Mpumalanga)

Photo-2 Baseline Survey to Mbombela LM (Mpumalanga)

Photo-3 Baseline Survey to some LMs jointly (Western Cape)

Photo-4 Baseline Survey to Ekuruhuleni Metro (Gauteng)

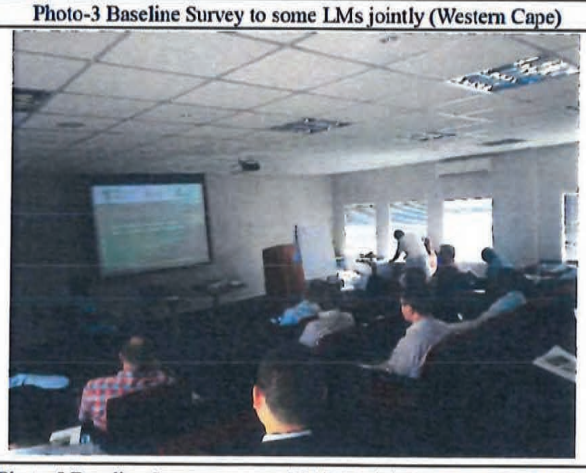


Photo-5 Baseline Survey to some LM/DMs jointly (Kwa-Zulu Natal)

Photo-6 Pipe Fixing Training Yard of eThekwini Metro (KZN)

Photo-7 Leak Detection Training Yard of Ugu DM (KZN)

Photo-8 Discussion of Training Yard in IBTC (Quantity Survey)

Photos of the Project (December 2017)

Photo-1 Confirmation of Underground Pipe at Candidate Location of Training Yard in IBTC

Photo-2 Visit to Private Company for Leak Detection Equipment

Photo-3 Established Project Office in IBTC

Photo-4 Preparation of Project Monitoring Sheets Ver.1)

Photo-5 The First JCC Meeting

Photo-6 The First JCC Meeting

Photo-7 ****

Photo-8 ****

Preparation of Project Monitoring Sheets (Draft)

Participants in Preparatory Meeting on 7th December 2017

S/N	Name	Title
1	Mr. Vincent Monene	Director, Engineering Services, NWRI, DWS
2	Ms. Rosa Mfomadi Rahube	Centre Manager, IBTC, DWS
3	Mr. Thabo Masike	Director, Water Use Efficiency, P&I, DWS
4	Mr. Albert Mmbidi	Director, ODA, IWS, DWS
5	Mr. Padi Andries	Water Use Efficiency, P&I, DWS
6	Ms. Samke Maboso	Water Use Efficiency, P&I, DWS
7	Ms. Margaret Matlala	Water Sector Institutional Development, P&I, DWS
8	Ms. Kentse Mathiba	Director, Operational Support, PMU, DWS
9	Mr. Nobutaka Maruyama	JICA Expert
10	Mr. Hiroki Niimura	JICA Expert
11	Mr. Akinori Miyoshi	JICA Expert, CA

Photos of Preparatory Meeting

Photo-1

Photo-2

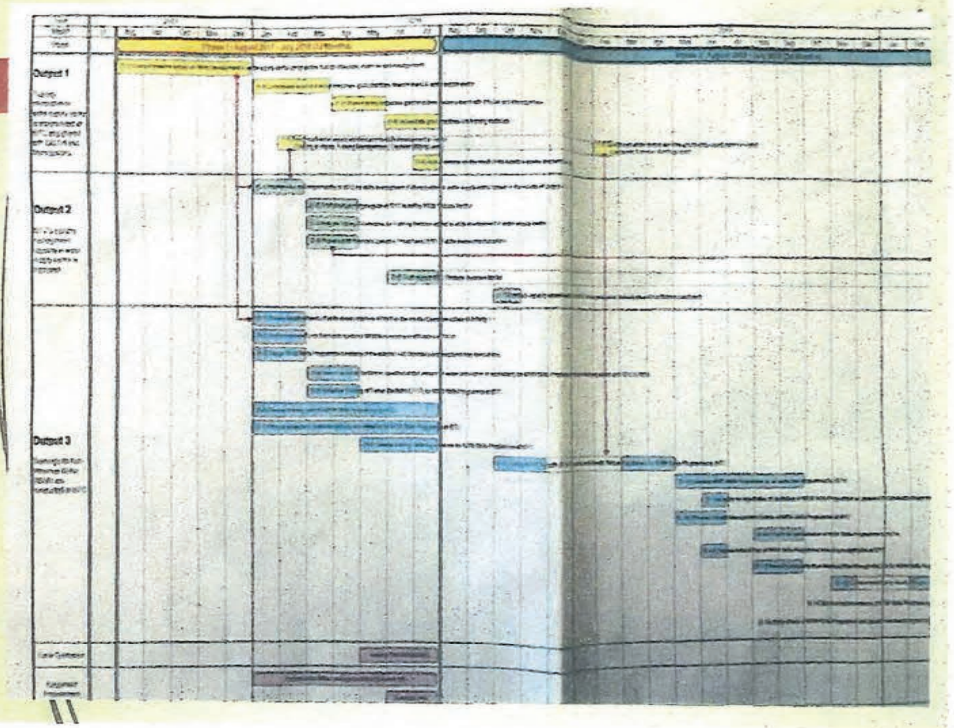
Photo-3

Photo-4

What we are to FACE From January

~ Many exciting challenges waiting for us
To provide Exciting Training to our trainees ~

2017.12.15 JCC /JICA Expert Team

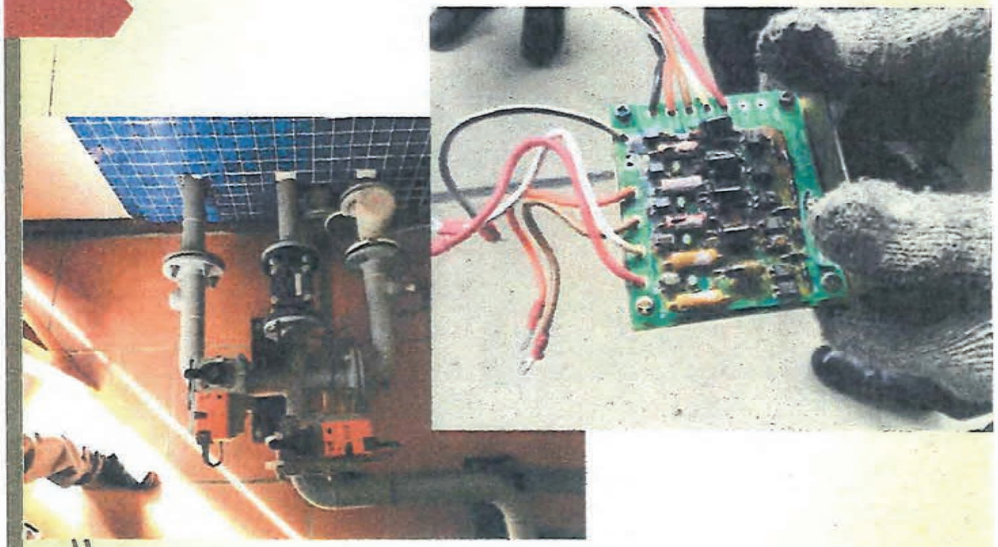


What do we need?

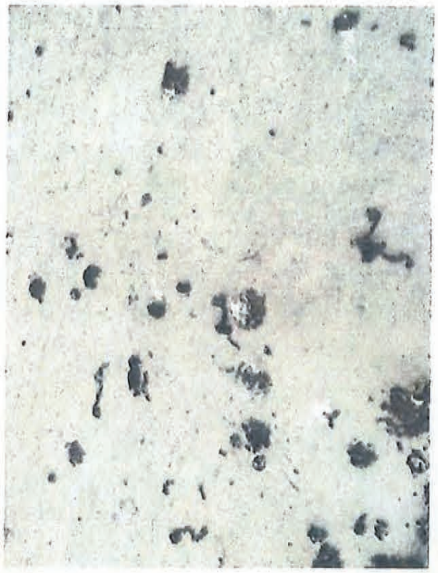
Sharp !?

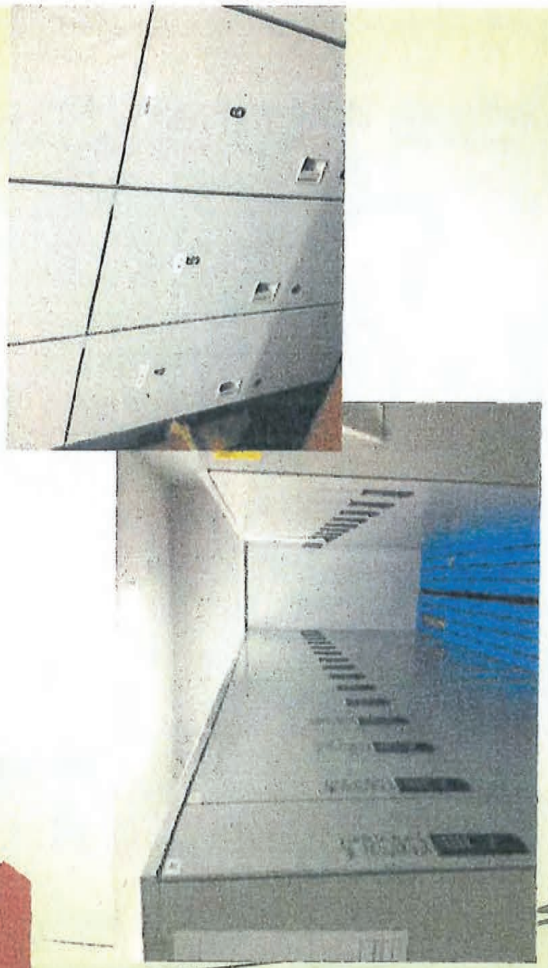
Is that it?

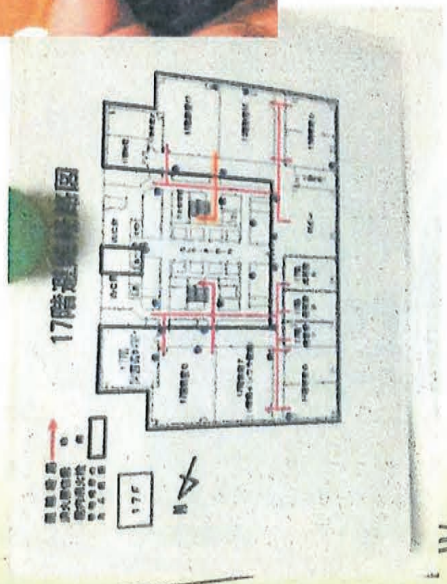
Lecture-based Training vs Hands-on Training

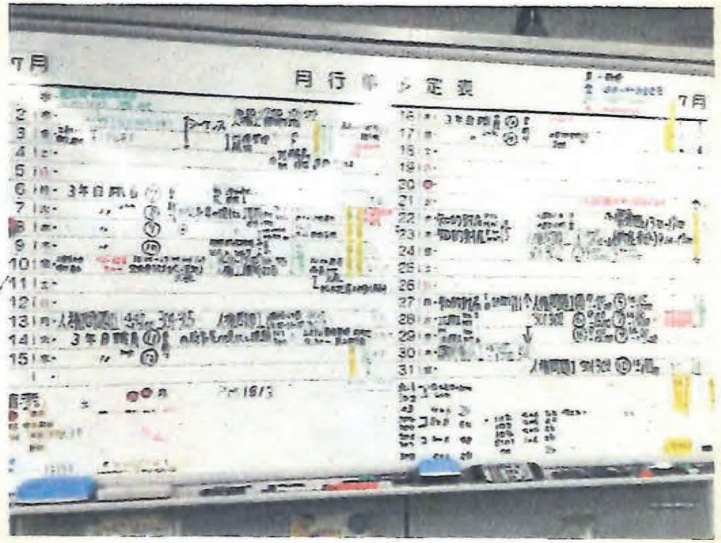


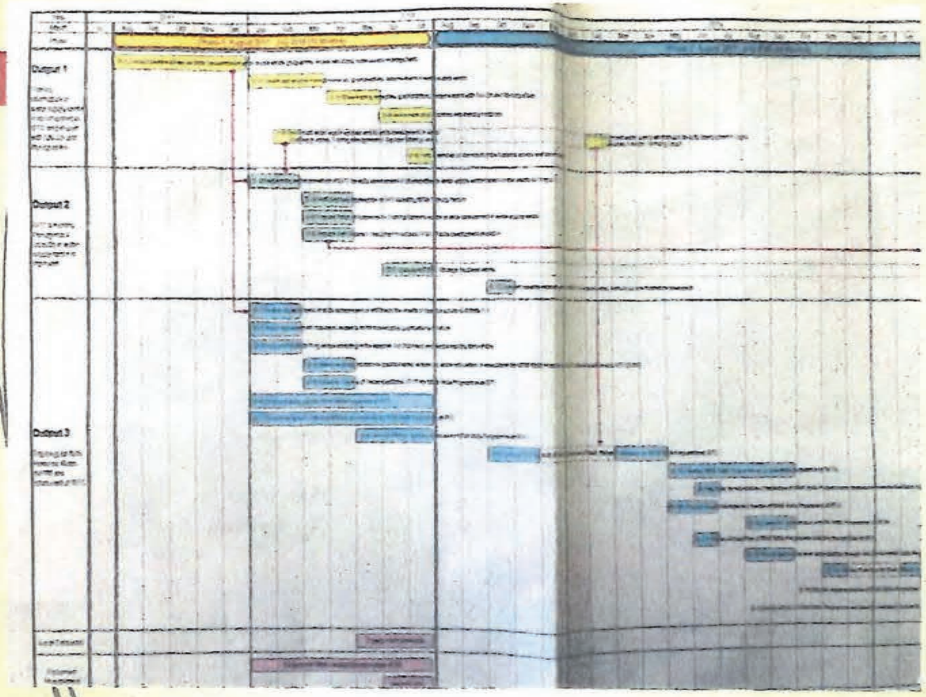
Panasonic





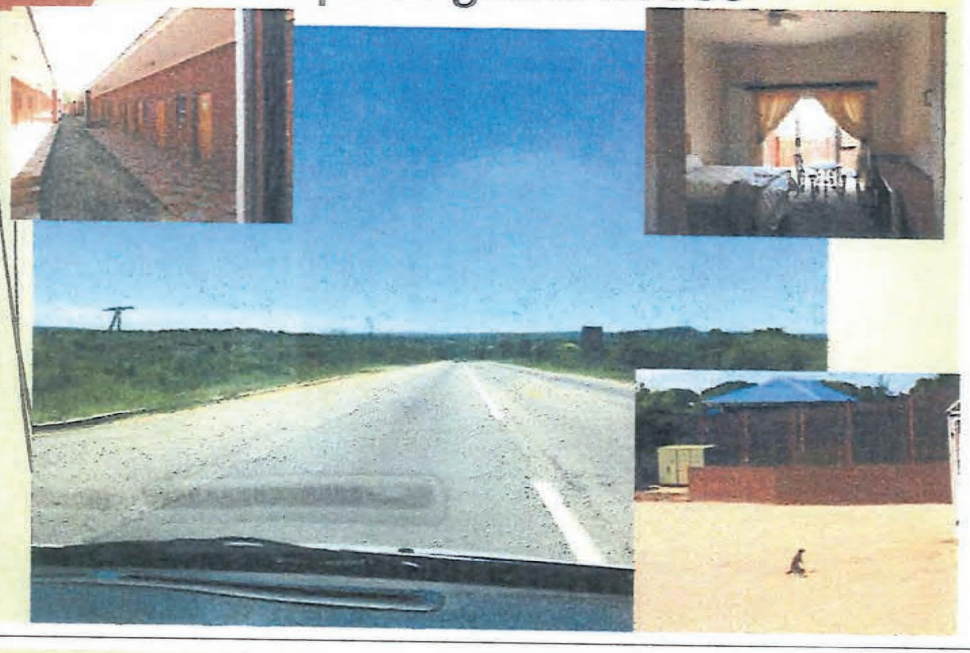

17階現況平面図


7月
月行事予定表
7月


Output 1
Output 2
Output 3

Or ...

Roodeplaat guest house ★



Recommendations

from JICA Expert team

- Municipalities are KEY for all aspects
- Training Field design Decides training and IBTC management
- Break＊3 down the Activities
- Team Staffs are KEY of JICA's Technical Training Programs
- Task Team Communication – see the same picture - weekly meeting

This is personally...

My Objective:

"Let's make another training program."

(When the time this project finishing)

"IBTC's Training is stunning. That changed my Life."

(From the participants taken this course after 10years)