Appraisal Plan

Demo part 2: D124 (A5) SoftMARS - Base Alpha City (Q2) 2021

ATL:

Pieter van Zyl

Sponsor:

Joan van Zyl

Organization:

Software for Mars (Pty) Ltd

Target:

CMMI Development V2.0 (CMMI-DEV) without SAM - Maturity Level 5

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Phase 1

Plan Appraisal – Sample Scope: Appraisal Setup

### Appraisal Name and Type

#### Demo part 2: D124 (A5) SoftMARS - Base Alpha City (Q2) 2021

Appraisal Type

Benchmark

Time Zone

Greenwich Standard Time

Partner

Demix

Business and Appraisal Objectives

[BO-1] Improve production efficiency to improve productivity

[BO-2] Improve delivery capacity

[BO-3] Reduce Code Acceptance Defects

[A1]: In support of the business objectives, understand the current strength and weaknesses of the CMMI maturity level 3 practices within the organisation [BO-1, BO-2 & BO-3].

ATM Signatures Required

No

Use of a virtual collection technique for appraisal

Yes

Virtual Technique Description

-

Plan Appraisal – Sample Scope: Organization

### Organization

Name

Software for Mars (Pty) Ltd

Native Language Name

Mars

Address Line 1

Room 1, Dome 1

Address Line 2

No. 1 First Street

City

Base Alpha City

State/Province/Region

Tharsis

Zip/Postal Code

4th planet

Website Address/URL

http://eMars.com

Rationale for Projects Excluded from OU

No projects excluded

ISIC Section - Division

(K-64) Financial and insurance activities - Financial service activities, except insurance and pension funding

### Organizational Unit (OU)

Name

R&D Department

Native Language Name

-

Description

The company provides space exploration services…

Organizations

Software for Mars (Pty) Ltd

Number of Sr. Management (FTEs)

1

Number of Sr. Management Talked To

1

Plan Appraisal - Sample Scope: Timeline and Scheduling

### Appraisal Timeline

#### Phase 1: Plan Appraisal

Plan Appraisal Start Date

2020/12/09

Plan Appraisal End Date

2021/04/11

#### Readiness Review: Readiness review for Version 1 of OE database

Readiness Review Start Date

2021/03/13

Readiness Review End Date

2021/03/13

#### Readiness Review: Readiness review for Version 2 of OE database

Readiness Review Start Date

2021/03/27

Readiness Review End Date

2021/03/27

#### Phase 2: Conduct Appraisal

Conduct Appraisal Start Date

2021/04/12

Conduct Appraisal End Date

2021/04/16

Days on Site

5

#### Phase 3: Report Results

Report Results Start Date

2021/04/16

Report Results End Date

2021/05/01

Plan Appraisal - Sample Scope: Appraisal Scope

### Target Level

#### CMMI Development V2.0 (CMMI-DEV) without SAM

Maturity Level 5

### Target Level Details

Engineering and Developing Products

Product Integration - L3

Technical Solution - L3

Ensuring Quality

Peer Reviews - L3

Process Quality Assurance - L3

Requirements Development and Management - L3

Verification and Validation - L3

Improving Performance

Managing Performance and Measurement - L5

Process Asset Development - L3

Process Management - L4

Managing Business Resilience

Risk and Opportunity Management - L3

Managing the Workforce

Organizational Training - L3

Planning and Managing Work

Estimating - L3

Monitor and Control - L3

Planning - L4

Supporting Implementation

Causal Analysis and Resolution - L5

Configuration Management - L2

Decision Analysis and Resolution - L3

Sustaining Habit and Persistence

Governance - L4

Implementation Infrastructure - L3

Plan Appraisal - Sample Scope: Appraisal Personnel

### Create Appraisal Team

#### Pieter van Zyl

Appraisal Team Leader

Partner Organization

Demix

Organization Affiliation

-

OU Relationship

Internal

Certifications

* Certified Associate CMMI V2.0
* Certified Associate CMMI V2.0
* Certified Lead Appraiser CMMI V2.0 Development
* Certified Lead Appraiser CMMI V2.0 High Maturity

Reporting Relationships

None

Phone Number

+27 82 900 0008

Email Address

[pwj.vanzyl@gmail.com](mailto:pwj.vanzyl@gmail.com)

#### Joan van Zyl

Appraisal Sponsor

Organization Affiliation

Demix (Pty) Ltd

OU Relationship

External

Certifications

* Certified Associate CMMI V2.0
* Certified ATM CMMI V2.0 High Maturity

Reporting Relationships

Individual is employed by the ATL's organization

Phone Number

082 787 4208

Email Address

[joan.vanzyl@demix.org](mailto:joan.vanzyl@demix.org)

### Team Member Experience and Responsibilities

#### Pieter van Zyl

Appraisal Team Leader

Domain Experience

* Development | 35 years
* Services | 30 years
* Supplier Management | 25 years

Type of Domain Experience

-

Management Experience

30 years

Mini-Team Assignment

-

Specific Responsibilities

-

### OU Appraisal Participants

See Appendix Documents

### Participant Responsibilities

See Appendix Documents

Plan Appraisal - Sample Scope: Projects

### Organizational Support Functions In Scope

See Appendix Documents

### OU Sample Eligible Projects

See Appendix Documents

### Sampling Factors

#### R&D Department

Name

Type of Work

Definition

All development projects

### Sampling Factor Values

#### R&D Department

Sampling Factor

Type of Work

Value

All projects

Description

All development projects

### Project Subgroups

#### R&D Department

Name

All projects (AP)

Sampling Factor Values

* Type of Work - All projects

### Project Subgroup Assignments

See Appendix Documents

Plan Appraisal - Sample Scope: Targets and Scope

### Organizational Support Function PA Exceptions

See Appendix Documents

### OU Project PA Exceptions

See Appendix Documents

### Projects to Include in Random Sample

*None*

Plan Appraisal - Random Generated Sample

### Sample Scope

See Appendix Documents

### Random Sample Creation

See Appendix Documents

### Project Substitution

*None*

### Sample Addition

*None*

### Sampled Project Details

See Appendix Documents

Plan Appraisal - Readiness: Appraisal Outputs

### Required Outputs

Name

Final Findings

Description of Output Delivery

The Final Findings will be presented as a PowerPoint presentation on the last on-site day, highlighting the strengths and weaknesses identified.

Name

Performance Report

Description of Output Delivery

-

Name

Sampled Project and OSF-level Practice Characterization Worksheets

Description of Output Delivery

OSF-level Practice Characterization Worksheets and Matrix included in the Final Findings presentation.

Name

Sampled Project and OSF-level Ratings Worksheets

Description of Output Delivery

OSF-level Practice Ratings Worksheets and Matrix included in the Final Findings presentation.

Name

Schedule

Description of Output Delivery

In the opening briefing presentation. The schedule shows the time slots allocated for each of the planned activities during the on-site phase of the appraisal.

### Performance Report Outputs

*None*

### Optional Outputs

Name

Follow up actions

Owner

Sponsor

Controls or Restrictions on Use

For the sponsor to decide.

Description of Output Delivery

Immediately follow-up actions after the final findings are presented.

Plan Appraisal - Readiness: OE Collection Plan

### OE Collection Approach

Collection Approach

Managed Discovery

Description

More than 90% of evidence will be provided in an OE database document, which will subsequently be used for verification with 10% or less in managed discovery mode.

### OE Collection Techniques

Collection Technique

OE Database

OE Type

Artifacts and Affirmations

Description

The team members will review the OE Database beforehand, from there creating the questions and during the appraisal use affirmations to corroborate the evidence with the affirmations.

### Responsiblity For Collection

Name

EPG member

Description

Process engineering group members to populate the OE.

### Performance Report Collection Approach

Name

ATL

Description

The ATL will collect it from the sponsor and the MA/EPG team.

### Summary of Initial OE

Summary of Initial OE

None

### Data Collection Timing

Name of Timeline Milestone

Version 1 of OE database

Date Completed

2021/03/12

List of Participants

ATL, ATMs and EPG members.

Name of Timeline Milestone

Version 2 of OE database

Date Completed

2021/03/26

List of Participants

ATL, ATMs and EPG member: A revised list based on a review of OE database version 1.

### Additional Information

Additional Information

None.

Plan Appraisal - Readiness: Readiness Reviews

### Readiness Reviews

Name

Readiness review for Version 1 of OE database

Start Date

2021/03/13

End Date

2021/03/13

Objectives

Determine how much of the OE is linked and available in the sampled database.

Confirm ATM availability and status.

Success Criteria

1) Minimum of 30% of Objective Evidence gathered.

2) ATMs all linked on CAS.

3) ATM training scheduled.

Members to be Present

LA and min 1 ATM.

Outcomes

List of missing evidence and action points.

Further Details

None.

Characterized Objective Evidence

No

Name

Readiness review for Version 2 of OE database

Start Date

2021/03/27

End Date

2021/03/27

Objectives

Determine how much of the OE is linked and available in the sampled database.

Confirm ATM availability and status.

Success Criteria

- 90% of OE linked in OE Database against sampled projects.

- Participants invited

- Risks mitigated

- Outstanding items identified

Members to be Present

LA and min 1 ATM.

Outcomes

90% of OE against sampled projects and support functions received - Yes

On-site schedule completed and participants invited - Yes

Risks mitigated - Yes

Outstanding items

- None

Further Details

None.

Characterized Objective Evidence

No

Plan Appraisal - Readiness: Logistics and Constraints

### Resource Effort Estimate

#### Total Resource Estimate

1548 hours

Participant Group

Appraisal Planning

Participant Individuals

ATL (1)

Task

Plan the appraisal

Time (hours)

120

Total Time (hours)

120

Participant Group

Appraisal Planning

Participant Individuals

ATM (4)

Task

Plan the appraisal

Time (hours)

8

Total Time (hours)

32

Participant Group

ATM training

Participant Individuals

ATL (1), ATM (4), RI (1)

Task

Training

Time (hours)

8

Total Time (hours)

48

Participant Group

CM

Participant Individuals

ATL (1), ATM (4), RI (1), CM (1)

Task

Interview

Time (hours)

1

Total Time (hours)

7

Participant Group

Consolidations

Participant Individuals

ATL (1), ATM (4), RI (1)

Task

Consolidate interview data, project level and support level characterisation, develop findings

Time (hours)

12

Total Time (hours)

72

Participant Group

Engineers

Participant Individuals

ATL (1), ATM (4), RI (1), Engineers (6)

Task

Interview

Time (hours)

3

Total Time (hours)

36

Participant Group

EPG/MA

Participant Individuals

ATL (1), ATM (4), RI (1), EPG (1)

Task

Interview

Time (hours)

3

Total Time (hours)

21

Participant Group

Final findings

Participant Individuals

ParticipantsFinal (15), ATM (4)

Task

Final findings

Time (hours)

1

Total Time (hours)

19

Participant Group

Objective Evidence Review

Participant Individuals

ATL (1), ATM (4), RI (1)

Task

Phase 2 review OE

Time (hours)

24

Total Time (hours)

144

Participant Group

OE collection 1

Participant Individuals

ATL (1), RI (1), OUC (1), EPG (1)

Task

Collect OE

Time (hours)

40

Total Time (hours)

160

Participant Group

OE collection 2

Participant Individuals

ATL (1), RI (1), OUC (1), EPG (1)

Task

Collect OE

Time (hours)

120

Total Time (hours)

480

Participant Group

Opening briefing

Participant Individuals

ATL (1), ATM (4), RI (1), ParticipantsOpen (18), Sponsor (1)

Task

Opening Presentation

Time (hours)

1

Total Time (hours)

25

Participant Group

OT

Participant Individuals

ATL (1), ATM (4), RI (1), OT (1)

Task

Interview

Time (hours)

1

Total Time (hours)

7

Participant Group

PMs

Participant Individuals

ATL (1), ATM (4), RI (1), PMs (2)

Task

Interview

Time (hours)

3

Total Time (hours)

24

Participant Group

PPQA

Participant Individuals

ATL (1), ATM (4), RI (1), PPQA (1)

Task

Interview

Time (hours)

1

Total Time (hours)

7

Participant Group

Preliminary findings 1

Participant Individuals

ATL (1), ATM (4), RI (1), ParticipantsPrelim1 (7)

Task

Preliminary findings

Time (hours)

1

Total Time (hours)

13

Participant Group

Preliminary findings 2

Participant Individuals

ATL (1), ATM (4), RI (1), ParticipantsPrelim2 (5)

Task

Preliminary findings

Time (hours)

1

Total Time (hours)

11

Participant Group

Readiness review 1

Participant Individuals

ATL (1), ATM (4), RI (1)

Task

Readiness review

Time (hours)

4

Total Time (hours)

24

Participant Group

Readiness review 2

Participant Individuals

ATL (1), ATM (4), RI (1)

Task

Readiness review

Time (hours)

8

Total Time (hours)

48

Participant Group

Review final findings

Participant Individuals

ATL (1), ATM (4), RI (1), ParticipantsFinal (15), Sponsor (1)

Task

Review preliminary findings

Time (hours)

4

Total Time (hours)

88

Participant Group

Review OE

Participant Individuals

ATL (1), ATM (4), RI (1)

Task

Review objective evidence

Time (hours)

18

Total Time (hours)

108

Participant Group

Senior management

Participant Individuals

ATL (1), ATM (4), RI (1), SM (2)

Task

Interview

Time (hours)

1

Total Time (hours)

8

Participant Group

Sponsor meetings

Participant Individuals

ATL (1), ATM (4), RI (1), Sponsor (1)

Task

Plan the appraisal

Time (hours)

5

Total Time (hours)

35

Participant Group

Technology Test

Participant Individuals

ATL (1), ATM (4), RI (1), ParticipantsTechTest (5)

Task

Technology Test

Time (hours)

1

Total Time (hours)

11

### Logistical Requirements

Name

Accommodations and travel support for ATMs, as needed

Equipment

-

Description

No travel is required, the appraisal is conducted using virtual methods.

Role Responsibility

ATL and Site coordinator.

Name

Description of the location(s) within the OU where appraisal activities will take place

Equipment

A room or rooms that can be used for performing interviews and delivering presentations

Description

Confidential site meeting rooms with virtual delivery facilities, such as a laptop with a camera and speakers, will be made available by the organisation.

Role Responsibility

ATL and Site coordinator.

### Appraisal Constraints

Name

Schedule Constraints

Description

The appraisal needs to be completed by middle November 2020.

### Risk Identification and Management

Name

ATM may become ill

Category

Personnel

Description

One of the appraisal team members may become ill or unavailable during the appraisal.

Impact

Low

Mitigation

1) Excluding the LA, plan for 4+ ATMs.

2) LA will work as an ATM if required.

3) Setup the schedule so that all appraisal team members are in all affirmation interviews.

Status

Closed

### COI Identification and Management

*None*

### Optional Follow-On Activities

Name

Lessons Learned

Description

After the final findings, the Appraisal Team will discuss the lessons learned.

### Confidentiality and Non-Attribution

*None*