

## DP1 material for Open Source Migration

## 1 REFERENCE TO HIGHER DECISION, PROBLEM DESCRIPTION AND ASSUMPTIONS.....3

### 1.1 General.....3

### 1.2 Prerequisites and limitations according to higher decisions.....3

#### Driving force.....3

## 2 SPECIFICATION OF OBJECTS, ALTERNATIVES.....3

### 2.1 Option 0.....3

#### Advantages of Option.....3

#### Disadvantages of Option.....3

### 2.2 Option 1 – Full out Open Source migration.....4

#### Redundancy.....4

#### Security.....4

#### Scalability.....4

#### Advantages of Option.....4

#### Disadvantages of Option.....4

### 2.2 Option 2 – Change from Solaris/SPARC to Linux/X86.....4

#### Redundancy.....4

#### Security.....5

#### Scalability.....5

#### Advantages of Option.....5

#### Disadvantages of Option.....5

### 2.3 Option 3 – From Bea WLS to JBoss.....5

#### Redundancy.....5

#### Security.....5

#### Scalability.....5

#### Advantages of Option.....5

#### Disadvantages of Option.....5

## 3 ECONOMICS, BUDGET.....5

### Summary.....6

### Option 0.....6

### Option 1.....6

### Option 2.....9

### Option 3.....11

## 4 BUDGET FOR PRODUCTION OBJECT 2008.....12

## 5 RECOMMENDATION.....12

## 1 Reference to higher decision, problem description and assumptions

### 1.1 General

<Text>

Time schedule for XYZ acceptance testing:

Acceptance test of of XYZ Open Source platform: 2008-??-?? -- 2008-??-??

Time schedule for XYZ production implementation:

Implementation of XYZ Open Source platform 2008-??-?? -- 2008-??-??

### 1.2 Prerequisites and limitations according to higher decisions

<text>

Driving force

- Reduction of TCO for software
- Create conditions for future services
- XYZ

## 2 Specification of objects, alternatives

Below is the different possible options to decide upon

- Option 0 is no migration to Open Source solutions in XYZ
- Option 1 is a full out Open Source migration in XYZ
- Option 2 is change from SUN Solaris/SPARC to Linux/X86 in XYZ
- Option 3 is change of application server in XYZ from Bea WLS to JBoss

### 2.1 Option 0

Advantages of Option

- No development costs for Open Source software solution needed.

Disadvantages of Option

- *Current server hardware is close to end of life which will eventually force investments for new server hardware.*
- XYZ continues to be based on proprietary software creating a higher TCO for the XYZ platform. Economical winnings of the XYZ Open Source Migration project fails to come.
- The XYZ solution continues to be subject to vendor lock-in.

- TeliaSonera continues to be dependent on Vendor X for development of new products and functionality.
- Server hardware costs continues to be high, using servers with SPARC architecture, making scalability and new investment expensive.

## 2.2 Option 1 – Full out Open Source migration

<description>

Redundancy

<text>

Security

<text>

Scalability

<text>

### Advantages of Option

- Reduced TCO for software in the XYZ platform
- Reduced TCO for server hardware in the XYZ platform
- XYZ platform scales more cheaply
- XYZ platform applies Open Architecture which makes it more easy to replace software components in the solution.
- TeliaSonera is not dependent on one software company to create new products and functionality.
- TeliaSonera can develop new products and functionality on it's own

### Disadvantages of Option

-

## 2.2 Option 2 – Change from Solaris/SPARC to Linux/X86

<description>

Redundancy

<text>

### Security

<text>

### Scalability

<text>

### Advantages of Option

- Reduced TCO for server hardware in the XYZ platform
- XYZ platform scales more cheaply

### Disadvantages of Option

-

## 2.3 Option 3 – From Bea WLS to JBoss

<description>

### Redundancy

<text>

### Security

<text>

### Scalability

<text>

### Advantages of Option

- Reduced TCO for software in the PNE platform
- XYZ platform applies Open Architecture which makes it more easy to replace software components in the solution.
- TeliaSonera is not dependent on one software company to create new products and functionality.
- TeliaSonera can develop new products and functionality on it's own

### Disadvantages of Option

-

### 3 Economics, budget

All prices are estimated and are in SEK.

#### Summary

##### Option 0

3 Years costs is X MSEK

##### Option 1

Investment need is X MSEK

3 Years costs, including investment is Y MSEK

3 Years costs, excluding investment is Y MSEK

##### Option 2

Investment need is X MSEK

3 Years savings, including investment is Y MSEK

3 Years savings, excluding investment is Y MSEK

##### Option 3

Investment need is X MSEK.

3 Years savings, including investment is Y MSEK

3 Years savings, excluding new server platform investment is Y MSEK

#### Option 0

3 Years costs is X MSEK

*This only includes e-mail related software costs. Hardware support costs are not included.*

Item	Monthly software cost (SEK)	Yearly costs (SEK)
<b>Total software costs 1 year</b>		
<b>Total software costs 3 years</b>		
<b>Total costs, 3 Years, including investment</b>		

#### Option 1

Investment need is X MSEK

3 Years costs, including investment is Y MSEK

3 Years costs, excluding investment is Y MSEK

Cost item	Article nr	Target environment	Price per unit	Units	Total in SEK
Hardware investment					
Hardware total					
Hardware and licenses total					
Support cost					
Support cost Year 1					
Yearly support cost					
Development effort					
Development cost					
Support cost 3 years					
Option 1 total (3 year support+Investment)					

Item	Monthly software cost (SEK)	Yearly costs (SEK)
Total software costs 1 year		

---

Total software costs 3 years		
Total Investments		
Total costs, 3 Years, including investment		



## Option 2

Investment need is X MSEK

3 Years savings, including investment is Y MSEK

3 Years savings, excluding investment is Y MSEK

Cost item	Article nr	Target environment	Price per unit	Units	Total in SEK
Hardware investment					
Hardware total					
Investment licenses					
Licenses total					
Hardware and licenses total					
Support cost					
Support cost Year 1					
Yearly support cost					
Development effort					
Development 1 FTE					
Development cost					
Support cost 3 years					
Option 1 total (3 year support+Investment)					

Item	Monthly savings (SEK)	Yearly Savings (SEK)
License cost for anti virus and spam software		
E-mail software support & licenses		
<b>Total Savings 1 year</b>		
<b>Total Investments</b>		
<b>Total savings, 3 Years, including investment</b>		
<b>Total savings, 3 Years, excluding investment for new server platform</b>		

## Option 3

Investment need is X MSEK.

3 Years savings, including investment is Y MSEK

3 Years savings, excluding new server platform investment is Y MSEK

Cost item	Article nr	Target environ ment	Price per unit	Units	Total in SEK
Hardware investment					
Hardware total					
Investment licenses					
Licenses total					
Hardware and licenses total					
Support cost					
Support cost Year 1					
Yearly support cost					
Development effort					
Development 1 FTE					
Development cost					
Support cost 3 years					
Option 1 total (3 year support+Investment)					

Item	Monthly savings (SEK)	Yearly Savings (SEK)
Total Savings 1 year		
Total Investments		
Total savings, 3 Years, including investment		
Total savings, 3 Years, excluding investment for new server platform		

#### 4 Budget for production object 2008

Hardware investment for XYZ Open Source migration is charged on WBS-nr: [XX-XXXXX-XXXXX](#)

#### 5 Recommendation

Recommendation is Option 2 to lower TCO, secure the future development and profitability of services in the PNE platform and to create an open architecture with as little vendor lock-in as possible.