

## **SERVICE LEVEL AGREEMENT**

**SERVICE LEVEL AGREEMENT ADDENDUM VIRTUALISATION – VERSION 2014-05-28**

# Table of Contents

1. Definitions.....	3
1.1. Control Panel.....	3
1.2. CPU.....	3
1.3. CPU core.....	3
1.4. Service.....	3
1.5. I/O-operations.....	3
1.6. Incident.....	3
1.7. Storage volume.....	3
1.8. RAM.....	3
1.9. Resource pool.....	3
1.10. Virtual Machine.....	3
2. SLA.....	4
3. Service Description.....	5
3.1. General.....	5
3.2. Availability resources.....	5
3.2.1. Redundancy.....	5
3.2.2. Memory.....	5
3.2.3. CPU.....	5
3.2.4. Control Panel.....	5
3.3. Availability storage.....	5
3.3.1. Redundancy.....	5
3.3.2. Capacity.....	5
3.3.3. Throughput.....	5
3.4. Availability network.....	5
4. Incidents.....	6
5. Non-Performance Penalties.....	7

## **1. Definitions**

### **1.1. Control Panel**

Web interface that can execute maintenance tasks in the virtualisation layer.

### **1.2. CPU**

The Central Processor Unit executes the instructions of the program to be processed.

### **1.3. CPU core**

CPU's consist of multiple independent cores. The cores share a part of the physical architecture of the CPU.

### **1.4. Service**

Virtual machine(s) or resource pool(s) on BIT's virtualisation platform.

### **1.5. I/O-operations**

Reading and/or writing actions to and for the data used on the virtual machines.

### **1.6. Incident**

When a service is no longer available due to causes other than maintenance in a maintenance interval, maintenance in consultation with the client, or misuse by the client.

### **1.7. Storage volume**

Space on the hard disc available to the virtual machine(s) or resource pool(s).

### **1.8. RAM**

Random Access Memory, volatile memory with random access.

### **1.9. Resource pool**

The whole of virtual networks, storage, memory and virtual cores for the virtual machines.

### **1.10. Virtual Machine**

A system in which to execute an operating system based on the available virtual resources. Including its own memory, CPU and storage.

## **2. SLA**

This document is the addendum on the framework SLA for the service virtualisation.

### **3. Service Description**

#### **3.1. General**

BIT manages a virtualisation platform. Through this platform, BIT provides clients with virtual machines and resource pools. This SLA is applicable to the availability of the resources for the virtual machines or the resource pool and the associated functionality in the control panel. Availability of the operating system or services on that operating system are not included in this SLA.

#### **3.2. Availability resources**

##### **3.2.1. Redundancy**

BIT reserves capacity on the physical infrastructure in several geographically separated data centers. Failure in one part of the physical infrastructure can thusly be compensated.

##### **3.2.2. Memory**

BIT guarantees the availability of the amount of RAM (memory) purchased by the client. These amounts are reserved.

##### **3.2.3. CPU**

The physical CPUs in the server systems are split into multiple virtual cores. BIT guarantees the availability of the amount of virtual CPU cores purchased by the client.

##### **3.2.4. Control Panel**

The control panel that is made available for maintenance of the virtual machines or the resource pool is hosted with load balancing from different data centers

#### **3.3. Availability storage**

##### **3.3.1. Redundancy**

The storage systems have been set up in a fully redundant setting, spread over two geographically separated data centers. The data that makes up the virtual machines and the resource pools are continually replicated between the separate storage systems. Failure of the systems in one of the data centers is compensated by the systems in the other data center.

##### **3.3.2. Capacity**

BIT reserves and guarantees the availability of the storage volume purchased by the client. These volumes are reserved.

##### **3.3.3. Throughput**

The available amount of bandwidth between the server and storage systems and the number of available I/O-operations are amply dimensioned. Peaks in the load can thusly be compensated.

#### **3.4. Availability network**

The availability of internet access of virtualisation services are described in the SLA addendum Internet Access.

#### 4. Incidents

Incidents are classified into three categories by BIT:

Priority	Description
1	The service is fully unavailable. <ul style="list-style-type: none"><li>• No memory available.</li><li>• No CPU core available.</li><li>• No storage volume available.</li></ul>
2	The service is available but degraded. <ul style="list-style-type: none"><li>• The purchased amount of memory is not fully available.</li><li>• The purchased number of virtual CPU cores are not fully available.</li><li>• The purchased storage volume is not fully available.</li></ul>
3	Incidents that barely cause the client any hindrance. <ul style="list-style-type: none"><li>• Reduced redundancy in relation to the resources.</li><li>• Reduced redundancy in relation to the storage.</li></ul>

## 5. Non-Performance Penalties

In the event of non-observance with the defined availability, the client is entitled to compensation according to the following table:

Priority	Time the service was unavailable	Non-performance penalty
1	4 minutes, 19 seconds and more	25% of the monthly sum
1 & 2	2 hours and more	50% of the monthly sum
1 & 2	8 hours and more	100% of the monthly sum

The non-performance penalty is limited to 100% of the monthly sum of the service in question. The non-performance penalty is limited to one penalty for a single incident case, even if the incident spreads over two calendar months or more. The penalty will only be rewarded upon customers request.