JSE NETWORK SERVICE PROVIDER (NSP) POLICY DOCUMENT

September 2014

Table of Contents

1.	Introduction	3
2.	Document Purpose	4
3.	Applicability	5
4.	Services Documentation And Agreements	5
5.	NSP Review And Approval Process	5
6.	NSP Renewal	5
7.	NSP Change Notification	5
8.	JSE NSP Committee	6
9.	NSP obligations	6
10.	NSP Policy Principles	7
10.1	Security (Confidentiality / Integrity / Availability)	7
10.2	Capacity Management	7
10.3	Monitoring and support	7
10.4	Change Management	7
10.5	Business Continuity / Resilience / Redundancy	7
10.6	Agreements / Legal (Obligations And Service Levels)	7
11.	Contact Information	8

1. INTRODUCTION

The Johannesburg Stock Exchange (JSE) is a licensed exchange in terms of the Financial Markets Act (FMA) and must maintain fair and orderly markets in order to ensure market integrity.

The JSE recognizes that telecommunications providers are a key player in the provisioning of network connectivity to, and on behalf of, JSE clients to the JSE to enable JSE clients to subscribe to the various JSE Systems or JSE services. In order to facilitate such external connectivity to the JSE Primary Data Centre, the JSE established a Meet-Me-Room (MMR) environment on the JSE Premises.

For the sake of clarity, including without limitation:

- NSPs who will provide only network connectivity for external JSE clients wishing to connect to the JSE, must host their networking equipment in the JSE MMR.
- Network monitoring and network management equipment can be hosted in the JSE MMR for management of the NSP's infrastructure or network monitoring and management on behalf of their clients.
- Order, Trade and any other related trading and business applications or platforms (including but not limited to Smart Order Routing, Execution Management Systems, Order Management Systems, Algorithmic applications) may not be hosted in the JSE MMR.
- The JSE MMR is <u>not</u> a Point of Presence (PoP) for providing connectivity for any other purpose than that of connectivity to JSE services or JSE Systems access.
- NSP's who wish to provide Time Sync Services from the Meet me Room will be allowed to install their own GPS Antenna and equipment at their own cost for an initial period of 12 month from 1 March 2015 until 29 February 2016 after which the GPS Antenna must be removed and all NSP's providing Time Sync Services will be required to make use of the JSE's GPS Antennas.

2. DOCUMENT PURPOSE

This policy which forms part of the 'Services Documentation' (as defined in the JSE Network Services Provider Agreement entered into by Network Service Providers (NSPs) and the JSE Limited (NSP Agreement)), sets out the principles that NSPs need to adhere to in order to be accredited by the JSE, PRIOR to providing network services to JSE clients (Policy).

A NSP is defined as a legal entity that is (i) a licensed telecommunications provider recognised by the Independent Communications Authority of South Africa (ICASA) or any international equivalent thereof, and (ii) whose core business function relates to the telecommunications industry, such as the provisioning of bandwidth and/or network connectivity services to, or on behalf of, JSE clients to enable JSE clients to subscribe to the various JSE services or JSE Systems as set out in the JSE Services Agreement (JSA), such as Client Access Network (CAN), Colocation Network (CN) and the Remote Disaster Recovery site (RDR) in Bryanston.

This Policy is not intended to define a complete set of governance principles or controls but only addresses the aspects related to JSE market integrity. Good governance and control must be applied by the NSPs as well as JSE clients. There is specific guidance on effective IT Governance contained in King III, guidance from IOSCO contained in "Principles on Outsourcing of Financial Services for Market Intermediaries", as well as guidance in the "Electronic Communications Facilities Leasing Regulations" from ICASA.

3. APPLICABILITY

Any NSP that intends providing network services to, and on behalf of, JSE clients must be accredited by the JSE in terms of this Policy. Application for accreditation must be done annually or as and when changes are made to the NSP solution or service.

From 1 March 2015, JSE clients may only use JSE accredited NSP for the provision of network services to enable JSE clients to subscribe to the various JSE services and JSE Systems.

4. SERVICES DOCUMENTATION AND AGREEMENTS

An accredited NSP will be required to sign the NSP Agreement (prior to offering any network services to, or on behalf of, any JSE clients) and meet such requirements as set out in the Services Documentation.

5. NSP REVIEW AND APPROVAL PROCESS

The NSP requiring initial JSE accreditation must formally apply to the JSE by submitting an application to <u>NSP@jse.co.za</u>. The application must indicate with sufficient detail how the NSP will comply with the principles as set out in this Policy. Initial accreditation is valid for one year from the date of JSE accreditation. The NSP Agreement must be signed by the NSP prior to the NSP offering any network services to, or on behalf of, any JSE clients.

NSP fees will be applicable for the initial JSE accreditation request as well as annually thereafter for each renewal. These fees are set out in the JSE Equity Market Price list available at this link: <u>JSE Price List</u>

6. NSP RENEWAL

NSPs are required to renew their accreditation annually in July to ensure that the NSP is still complying with the principles as set out in this Policy as updated by the JSE from time to time. The JSE may need to adjust this Policy in line with requirements that are seen to be in the best interests of maintaining market integrity. Renewals must be submitted to <u>NSP@jse.co.za</u> at least one month prior to the accreditation expiry.

7. NSP CHANGE NOTIFICATION

A NSP must immediately notify the JSE in writing of any changes:

- 7.1. made by the NSP that reduces compliance with any of the principles as set out in this Policy; and
- 7.2. to the list of JSE clients that the NSP is providing network services to.

Changes must be submitted to NSP@jse.co.za.

8. JSE NSP COMMITTEE

A JSE NSP Committee exists consisting of JSE employees with business and technical expertise across the JSE markets and services and is responsible for, inter alia:

- 8.1. Review and approval of new applications;
- 8.2. Approval of annual renewal applications;
- 8.3. Review of notification of changes;
- 8.4. Consideration of any non-compliance to this Policy; and
- 8.5. Ongoing review of this Policy in accordance with changing requirements to ensure ongoing market integrity.

9. NSP OBLIGATIONS

- 9.1. NSP Meet-Me-Room (MMR) rental will include 2kW of power usage per rack which equates to a maximum power usage of 1488kWh for any given month.
- 9.2. Power will only be measured on an ad-hoc basis when required by the JSE and any additional power usage fees will be passed through to the NSP as per the JSE Price List.
- 9.3. Power usage fees shall be subject to any revised charges or rates as notified by the Municipality of the City of Johannesburg or the National Energy Regulator of South Africa or any other authorised body from time to time as applicable to the JSE Premises.
- 9.4. A NSP must provide their own rack with the following dimensions: 800 x 600 x 43U or 1000 x 600 x 43U.
- 9.5. A NSP is responsible for power distribution inside the rack and must connect to a 32Amp single phase caravan plug supplied under floor.
- 9.6. A NSP must ensure dual power distribution inside their rack for A and B power for all devices. Where a device is installed with only 1 power supply the NSP must install a static switch to ensure redundancy on the single power supply device
- 9.7. A NSP should ensure that they have the necessary skills to manage connectivity to the JSE's Systems and services e.g. management of multicast data.
- 9.8. A NSP should ensure that JSE Clients are treated fairly in relation to one another for the same service.

10. NSP POLICY PRINCIPLES

10.1. SECURITY (CONFIDENTIALITY / INTEGRITY / AVAILABILITY)

- 10.1.1.A NSP must ensure that it protects confidential, proprietary, client and other information of the entities they provide services to, from any unauthorized disclosure to person or entities.
- 10.1.2.A NSP must ensure it has adequate policies and procedures in place to manage authorized staff or agents who have access to the platform infrastructure that they use to provide services to, or on behalf of, the JSE clients.
- 10.1.3.A NSP must ensure adequate controls are in place to preserve the integrity and availability for the services to their clients (e.g. policies and capabilities to protect against logical threats such as wire sniffing, Denial of Service attacks and hacking of the network infrastructure).
- 10.1.4.A NSP should clarify any network peering included within their services to, or on behalf of, JSE clients.

10.2. CAPACITY MANAGEMENT

10.2.1.A NSP must have adequate capacity to accommodate the aggregated peak bandwidth requirements of, or on behalf of, the JSE clients they provide services to.

10.3. MONITORING AND SUPPORT

- 10.3.1.A NSP must implement proactive monitoring capabilities with support policies and procedures that mitigate disruption to the JSE clients they provide services to.
- 10.3.2.A NSP must ensure that the appropriate escalation, business and technical support services are in place in order to assist JSE clients they provide services to and or the JSE with efficient problem resolution.

10.4. CHANGE MANAGEMENT

10.4.1.A formal change management process must be practiced by the NSP to ensure minimal disruption and / or no negative impact or risk to the operations of the entities that they provide services to and JSE services and JSE Systems.

10.5. BUSINESS CONTINUITY / RESILIENCE / REDUNDANCY

10.5.1.A NSP must have appropriate contingency (reduces impact in the event of a failure), and resilience (prevents failures) arrangements to ensure minimal disruption and / or negative impact to the operations of the entities they provide services to and JSE services and JSE Systems.

10.6. AGREEMENTS / LEGAL (OBLIGATIONS AND SERVICE LEVELS)

10.6.1.A NSP must provide JSE clients they provide services to with a legally binding written contract, which is appropriate to the materiality of the services provided.

11. CONTACT INFORMATION

JSE Limited	JSE Data Centre Manager
One Exchange Square	NSP@jse.co.za
Gwen Lane, Sandown	Tel: +27 11 520 7440
South Africa	
Tel: +27 11 520 7000	Enquiries:
www.jse.co.za	Nic Cronje
	JSE Data Centre Manager
	Tel: +27 11 520 7440