

# CAPABILITY STATEMENT



### **GLOBAL SWITCH PROPERTY (AUSTRALIA) PTY LTD**

400 HARRIS STREET ULTIMO NSW 2007 AUSTRALIA

Tel: +61 (0) 2 9566 7000 Fax: +61 (0) 2 9566 7032

SALES: info@globalswitch.com.au WEBSITE: www.globalswitch.com

### 1.0 INTRODUCTION

#### GLOBAL SWITCH FACILITY AT 400 HARRIS STREET, ULTIMO NSW 2007

Opened in July 2002, the Sydney facility has a gross floor area of 41,575 sqm with a net lettable area of 26,684 sqm. The average floor plate is approx 4,000 sqm. Global Switch Sydney offers the highest level of security, resilience and flexibility to ensure our customers can meet and maintain the everincreasing demands of both their IT systems and their clients' expectations.

The Harris Street, Ultimo facility is jointly owned by Global Switch Property (Australia) Pty Ltd and the

Sydney Harbour Foreshore Authority (SHFA). SHFA owns and leases 50% of the building shell and land to Global Switch under a 45 year lease. Global Switch owns all other plant, fixtures and fittings within the operation 100%. Global Switch and SHFA have invested over \$145M in converting the building, which formerly housed the NSW Government Printing Office, into a world class data centre designed to accommodate large-scale highly-secure customer data centres

#### **COMPANY BACKGROUND**

Global Switch Sydney forms part of a 265,000m<sup>2</sup> (gross) international portfolio of carrier neutral technical real estate, owned and operated by Global Switch. In addition to the Sydney operation, facilities are located in Singapore, Amsterdam, Frankfurt, London (x2), Madrid and Paris. Each of these large-scale facilities provides specialist technical space designed to support both corporate data centre requirements and the technical installation and colocation needs of telecommunications carriers.



#### SPACE SOLUTIONS

For technical space Global Switch has two standard product offerings that can be customised to meet the client's requirements. Each has its own merits depending upon the level of capital contribution the client wishes to commit, the extent of engineering maintenance the client wishes to retain and the scope of the Service Level Agreement desired. Generally, if Global Switch provide the equipment it is usual for Global Switch to maintain it and also warrant its performance and operation under our high specification Service Level Agreement.

FULLY-FITTED RAISED FLOOR Space is the ready-to-go option, where the client simply installs IT hardware and racks of equipment on the supplied raised floor area, plugs in the power rails and connects IT cables.

SHELL & POWER is the base level product (concrete slab; no raised floor) that has a comprehensive list of core services supplied to the area and is ready immediately for the client to take possession and begin fit out in their demised premises in line with their requirements.

OFFICE SPACE - Global Switch can meet the client's office requirements either by providing office space within the existing premises at 400 Harris Street, Ultimo or, alternatively, would be pleased to discuss an option to locate the office space within a proposed new adjacent office development.

Please refer to Section 3.0 Standard Inclusions which details the elements included in each product.

### 2.0 VALUE PROPOSITION

The Global Switch facility and business model are geared specifically to provide value for customers. Global Switch offers Customer the security of a high quality, discrete, robust and neutral environment in which to develop and operate its requirement.

#### POWER

The building services have been built to a design and specification that:

- Eliminates as far as is possible single points of failure.
- Provides a minimum of N+1 redundancy to essential plant and equipment.
- Conforms to all local building and codes of practice.
- Where possible employs energy saving features to reduce operation costs.
- Was subjected to exhaustive commissioning and "doomsday failure" test scenarios.

#### Loads and Available Power

The Incoming electrical power is provided at 33kV, rated at 22MVA. 2 (3) incoming radial feeders are provided from a zone primary substation. Supplies are transformed to 11kV distribution via 2 (3) 33kV/11kV distribution transformers. The transformers comprise cast resin design and have the ability to be forced cooled. Transformer distribution is configured to provide N+1 resilience to customer floors. Power density of up to 800w/m2 or more can be provided to customer areas.

#### Distribution

Electrical distribution within the building is undertaken at 11kV and comprises some 39 substations, connected in ring main format arranged in parallel redundant configuration. Cabling originates from 11kV switchboards connected directly to diesel coupled rotary UPS systems providing continuous output for critical loads and short break supplies for non-critical loads.

#### Generator Back Up

Provided by direct diesel backed Piller rotary UPS system that fully supports the facility under maximum load with a combination of no break and short break power supplies. The diesel engines are cooled by remote radiators. A minimum of 24 hours fuel capacity is retained on site via 360,000 litre fuel storage system.

Currently, there are 10 x 2.2 MVA Caterpillar diesel generators installed in configuration of 2 x 3 unit and 1 x 4 unit redundant configuration. The ultimate design will consist of 22 diesel generators in 6 x 3 units and 1 x 4 unit parallel redundant configuration.

UPS power, comprising N+1 redundant central units, is provided with ultimately 6 UPS primary groups and one central Redundant group. The system is based on Piller Powerbridge stored energy systems backed up by direct coupled diesel generator sets. Distribution is undertaken at 11kV and is available throughout the building.

The no break power supplies to each floor comprise two primary supplies (A & B) and a redundant supply (R) The primary supplies are fed from separate UPS groups, the redundant from a redundant UPS group.

#### SECURITY

The combination of excellent design, highest-level operational procedures and robust physical attributes ensure Global Switch clients' security is never compromised. Service Level Agreement's (SLA's), 24x7 on-site security and technical staff, building strength, multiple back-up units, rigid monitoring, maintenance and policies are all integral to ensuring the security of clients' IT systems and data.

#### FLEXIBILITY

Global Switch is able to offer flexible commercial proposals. We appreciate planning of data centre space against forecast demand can be challenging in today's climate. The customer can mitigate its risk by leveraging off Global Switch's scale and considering a staged take up of data centre space. The actual quantity and locality of the required space would be discussed and determined during the planning process.

#### **FULLY OPERATIONAL**

Global Switch Sydney is fully-operational with all base building systems installed, commissioned, operating and regularly tested according to our strict building maintenance procedures. This allows the client to take possession of 'Shell and Power' space ready for final fit-out in accordance with the specific client requirement. This will give the client greater certainty in meeting its budget objectives and time line for commencement of production site/data recovery operations. For example, the client can avoid project risks such as equipment delivery and construction delays, approval issues, teething problems in commissioning new systems and other unforseen costs that may be encountered in building their own highly-redundant technical space with the mechanical services and building systems necessary to support production site/data recovery operations.

#### NEUTRALITY

Global Switch operates a neutral business model, allowing our customers to "un-bundle" services, specifically:



International and Local Loop Connectivity – the client can obtain pricing and network services from the carriers within our facility, or can invite carriers of their choice into our building with no interconnect or penalty charges.

Customers negotiate connectivity charges in a competitive environment and Global Switch does not charge interconnect fees. As a core plank of Global Switch's neutral model, it does not participate in any profit-sharing arrangements with any building occupants or suppliers.

#### SERVICE LEVEL AGREEMENTS

Global Switch customers typically comprise the Fortune 100 companies. Our SLA's are fair and balanced, tailored specifically to support the exacting demands of highly IT-reliant organisations. We can offer the highest SLA's of any facility in Sydney, 24 x 7 x 365, with power and cooling availability guarantees.

#### COMMUNICATIONS RESILIENCE

Resilience, redundancy and reduced latency in communications are key factors in determining production site/data recovery facility location. Our scale, location and customer base translates into a diverse and rich fibre connectivity offer. Global Switch provides access to multiple telecommunications providers located in two Meet Me Rooms (MMRs), via diverse dedicated connections. Carriers have installed large capacity fibre cables and multiplexers in Global Switch Sydney (STM4 – STM16) that connect through diverse cable entry points to separate exchanges. Our Sydney facility currently offers the following connectivity:

- AT&T
- BigAir (wireless service provider)
- MCI (provisioning)
- Nextgen Networks
- NTT
- Pipe Networks
- Soul Pattison Telecommunications
- AAPT

#### **REDUCED ONGOING COSTS**

- Pacific Teleport (satellite service provider)
- PowerTel
- SingTel Optus
- Telstra
- Uecomm
- Agile
- Digital Distribution Australia

Global Switch offers a number of other advantages for clients seeking to reduce operating costs. For example, insurance costs can be substantially reduced for clients in Global Switch compared to those taking warehouse/office space, as clients typically do not need to insure the substantial investment in building infrastructure (transformers, generators, UPS, fire suppression systems, cooling towers, etc.) that are already insured by Global Switch.

In addition, Global Switch provides clients access to electricity at 33kV tariff rates which are lower than the 11kV rates typically found in warehouse or office buildings. Global Switch also provides building security and facilities management services as part of its standard offering. Global Switch's central Sydney location often means that clients can generate considerable savings on Telco tail circuit charges, as compared to locating in facilities in suburban Sydney.

#### FINANCIAL STRENGTH

Global Switch is owned by Aldersgate Investments Limited. Aldersgate Investments Limited is owned by the Reuben Brothers, one of the major property owners in the United Kingdom who hold substantial investments in property and asset-based businesses. For more information about their investment activities, visit www.reubenbrothers.com.

### 3.0 STANDARD INCLUSIONS

Below is a list of Global Switch "Standard Inclusions" for its two technical products.

SERVICE	FULLY-FITTED RAISED FLOOR	SHELL & POWER
ELECTRICAL ENGINEERING		
Dual 33KV Dedicated incoming feeders	Included	Included
N+1 Electrical primary distribution @ 11KV	Included	Included up to floor by floor main switchboard
Parallel Redundant Rotary UPS power	Included	Included up to floor by floor main switchboard
Power distribution up to Floor PDUs (415/240V)	Included	Not Included
2 N Electronic static change over switches	Included	Not Included
Harmonic / instrument test locations	Included	Not Included
MECHANICAL ENGINEERING		
N + 1 Cooling towers	Included	Included
N + 1 Main Chilled Water system	Included	Included up to riser interface
N + 1 Computer Room air-conditioning (CRAC) unit system	Included	Not Included
Mechanical services power supplies	Included	Included up to floor by floor main switchboard
100% generator support to Mission Critical mechanical services	Included	Included up to floor by floor main switchboard
FIRE AND CRITICAL SYSTEMS PROTECTION SERVIC	ES	
Dry Pipe Sprinkler System	Included	Included in Open floor plan design format
Inergen <sup>®</sup> Gas Fire Suppression system (approximately 2,500 cubic metre capacity on N+N format)	Included	Up to Riser interface
VESDA type smoke detection to Customer area	Included	Included in Open floor plan design format
Leak detection to on floor critical plant areas	Included	Not Included
Guaranteed minimum of 24 hours on-site fuel supply	Included	Included

SERVICE	FULLY-FITTED RAISED FLOOR	SHELL & POWER
CENTRAL SERVICES		
24 x 7 x 365 Security to five levels of access	Included	Included
24 x 7 x 365 Technical staff attendance	Included	Included for Central Services
BMS reporting	Included	Included for equipment up to point of Customer Interface
Use of conference rooms for presentations / training	Included	Included
Central services costs for equipment maintenance	Included	Included
Central services cost for equipment operation	Included	Not Included
Common area lighting, power and cooling	Included	Included
Customer area CRAC system maintenance	Included	Not Included
Central electricity monitoring and billing to customer	Included	Included
COMMUNICATIONS SERVICES		
Access to Dual Meet-Me-Rooms for Carrier interconnection	Included	Included
N + 1 Main IT Riser Access	Included	Included
Use of Global Switch riser space for data communications	Included	Included
Roof Top Installation of Wireless or Satellite antennae	Optional	Optional

OFFICE SPACE	
Raised Floor with Carpets	Included
Full height partition walls between reception and open plan office area	Included
Doors	Included
One meeting room area - 6 person capacity	Included
Lighting to 500 lux	Included
Emergency lighting	Included
Small power via raised floor	Included
IT carcass for office IT	Included
HVAC to office to code requirements	Included
Statutory signage	Included
Access to PABX	Optional
Office furniture, workstations, false ceilings, window blinds, office equipment, telephones, customer signage	Not included

### 4.0 CARRIERS AT GLOBAL SWITCH



#### CARRIERS IN GLOBAL SWITCH

## 5.0 CLOSING

We would be pleased to provide you and your personnel with a detailed tour of the Facility to support our contention that it is the finest data centre available in Australia.

### 6.0 FACILITY PHOTOGRAPHS



Figure 1: View of Global Switch Sydney at the corner of Harris & Quarry Streets



Figure 2: View from Level 7 of Global Switch Facility



Figure 3: Global Switch Sydney Reception and Security Desk



Figure 4: "Shell and Power" Floor Space Ready for Fit Out



Figure 5: Fully-Fitted Raised Floor Technical Space



Figure 6: 33KV Mains Power Transformer (N + 1 installed)



Figure 7: 11KV Power Distribution Room



Figure 8 - Caterpillar 2.2 MVa Backup Generator (10 now installed in N + N configuration)



Figure 9: Trane 4.5 MW Water Chillers used for Air Conditioning (N + 1 configuration)



Figure 10: Dry Pipe Fire Suppression System is used in addition to Inergen® Gas System



Figure 11: Water Storage Tank (403,000 Litres) providing a minimum 12 hours on-site backup



Figure 12: Security Desk with Access to 116 Digitally Archived CCTV Cameras