

## **Dot London Personnel Resources**

The applicant, Dot London Domains Limited (DLDL), has contracted with Minds + Machines LTD of London (M+M London) for registry services. M+M London is a wholly owned subsidiary of TLDH. TLDH is also the parent company to Minds + Machines LLC, based in Los Angeles (M+M LA), the registry service provider for the .FM registry. M+M London will be supported in several tasks by employees from M+M LA and from TLDH.

All .London administrative staff and some technical staff will be based in London, with many registry technical functions and expertise provided by M+M LA. A dedicated data center, a replication of the M+M SRS platform in Los Angeles, will be built and tested before the end of the evaluation period. Steady-state operations will include the staff listed as well as any additional staff needed as the registry matures.

The full M+M London Staff will consist of:

- Managing Director
- Chief Financial Officer
- Chief Technical Officer
- Marketing Director
- M+M Liaison
- Community Liaison
- Registrar Liaison
- Network Architect
- NOC Technicians (3)
- Controller
- Marketing Associates (2)
- Office Systems Administrator
- Administrative and Secretarial Support (2)
- Registrar Customer Service Representatives (2)

The M+M LA staff will support the .London staff, providing operational support and services such as compliance, development, and database administration. The M+M LA staff that will provide service to M+M London consists of the following resources:

- VP Policy
- VP Client Services
- VP Corporate Development
- Director Legal Affairs
- Compliance Administrator
- Chief Technical Officer
- Registrar Cust Svc Tech 1

- Registrar Cust Svc Tech 2
- Network Ops Manager
- Network Engineer 1
- Network Engineer 2
- Network Engineer 3
- Espresso Application Developer
- Espresso Application Developer 2
- Espresso Application Developer 3
- Database Developer
- Database Developer 2
- Information Security Officer
- Database Administrator
- Database Administrator 2

**Outsourced:**

- Network Architect
- Ombudsman
- DNS/DNSSEC
- Escrow

**Job Descriptions – Minds + Machines LTD (M+M London)**

*The Managing Director* will have overall responsibility for .London; leading the .london registry business, and managing a team of approximately 20 staff. The MD will be the public face of DLDL, representing DLDL through speaking engagements and presentations. The MD will report to the M+M London Board of Directors.

*The Chief Financial Officer* will have overall responsibility for the financial health of the .LONDON registry, managing the complicated deferred revenue financial model. The CFO will manage the accounting duties and will report to the Managing Director.

*The Chief Technical Officer* will have overall responsibility for the technical operations of the .LONDON registry. In addition to managing the registry system according to industry-best practice, the CTO will manage a team and deliver projects on time and on budget. The CTO will be responsible for data protection and security, including interacting with counsel to assure compliance with relevant data protection legislation. The CTO will report to the Managing Director.

*The Marketing Director* will have overall responsibility for marketing and sales of .LONDON domain names. The Marketing Director will report to the Managing Director.

*The M+M Liaison* will be responsible for different tasks at different times, but in general is responsible for coordination between M+M London, M+M LA, and DLDL. During application evaluation, the Liaison will assist with planning, policy, and reporting; during the start-up phase, the Liaison will be primarily tasked with co-ordinating the various marketing and public relations launch efforts; finally, during steady-state operations, the Liaison will function as the primary link between DLDL and Minds + Machines. The M+M Liaison will report directly to the Managing Director.

*The Community Liaison* will be responsible for bringing community concerns to the attention of the dot LONDON operation, and for informing interested groups about dot LONDON's mission and benefits. Instead of public relations via the media, the Community Liaison would be available for presentations or meetings with community groups or organizations. The Community Liaison would report to the Marketing Director.

*The Registrar Liaison* will act as the main point of contact with ICANN-accredited registrars. The Registrar Liaison will visit registrars and update them on new .LONDON programs, provide them with sales incentives, and review and improve their promotion of the .LONDON registry. The Registrar Liaison will attend ICANN meeting and registrar conferences and trade shows and act as DLDL's ambassador at industry gatherings. The Registrar Liaison will have overall responsibility for promoting .LONDON to ICANN-accredited registrars. The Registrar Liaison will report to the Marketing Director.

*Technical Staff.* The NOC Technicians will be responsible for keeping the dot LONDON datacenter functioning smoothly. Given the need for 24-hour coverage, three specialists are needed. In addition to sharing on-call duties in case of an emergency or other urgent need, the NOC Technicians will be hired for the different skills required for the efficient and secure operation of the datacenter. A network architect will be responsible for a stable and responsive network. A security specialist will be charged with monitoring the network and keeping it safe. A programmer will be responsible for any needed code changes, including

troubleshooting any issues with the registry installation or its components. The NOC Technicians will report to the CTO.

*The Controller* will handle the day-to-day accounting needs of the dot LONDON operation, in charge of payroll and benefits, registrar accounts, and accounts payable. The Controller will report to the CFO.

*The Marketing Associates (2)* will be responsible for marketing tasks assigned to them by the Marketing Director. They will be expected to execute against the marketing plan. The Marketing Associates will report to the Marketing Director.

*The Systems Administrator (SysAdmin)* will be responsible for making sure that the technology used by the dot LONDON office is working such that the staff are productive and efficient. The SysAdmin will be responsible for making sure that all the staff have compatible software on their computers, that the printers, scanners, routers, and other office equipment function properly. The SysAdmin will also be responsible for the office network – its speed, reliability, and security. In addition, the SysAdmin will be responsible for handling email servers and the email accounts of staff. The SysAdmin will report to the CTO.

*Administrative Support staff (2)* will provide assistance to the executives of M+M Londond and secondarily to other staff. The Admin Support staff will assist with travel arrangements, booking appointments, greeting visitors, answering general telephone inquiries, and other general office tasks. The Admin Support Staff will report to the Marketing Director.

*The Registrar Customer Service Representatives (2)* will handle day-to-day registrar interactions, including assisting them with questions about their accounts, particular transactions, helping them use the Espresso registry software, answering questions about ongoing promotions and pricing. The Registrar Customer Service Representatives are also the first line to answer any technical questions, and are responsible for escalating any issues as per our service-level agreements. The Registrar Customer Service Representatives will report to the Marketing Director, but will also have direct lines to the Network Managers and Controller where the issue they are handling warrants it.

## **Job Descriptions- Minds + Machines LLC (M+M LA)**

### Vice President for Corporate Development

Responsible for understanding the competitive dynamics of the industry, recognizing new opportunities, developing new business initiatives and implementing corporate and business- level strategies for the company. Works with the executive team to develop corporate and business level strategies and to communicate key positioning and performance metrics to strategic constituencies. Reports to the CEO

### Vice President for Policy

Maintains knowledge of ICANN's (and other pertinent governing bodies') policies and activities. Represents the company at industry events. Responsible for external affairs and developing advocacy and policy strategy for advancing the company's goals. Manages abuse complaint intake and rights protection mechanisms. Reports to the CEO.

### Director Legal Affairs

Provides management with effective legal advice on business issues and company strategies; selects and oversees the work of outside counsel; drafts and edits complex agreements; ensures that the company operates in compliance with applicable laws and regulations, including ICANN specifications, consensus policies and RFCs; helps prepare briefs, complaints, motions and other court documents. Other tasks may include advising the human resources department on employment law and labor and benefit issues; drafting and negotiating contracts and agreements; and providing litigation support. Oversees Compliance Administrator. Reports to the CEO.

### Compliance Administrator

The Compliance Administrator works with the Director of Legal Affairs and the Vice President for Policy to design and implement programs, policies and practices to ensure that all business units are in compliance with federal, state and local regulatory requirements, as well as ICANN specifications and consensus policies. Ensures compliance with relevant RFCs and local privacy policies. Tracks laws and regulations that might affect the organization's policies. Prepares compliance reports to present to management. The Compliance Administrator is the Designated Abuse Point of Contact for the Registry. Reports to the Director of Legal Affairs.

### Technical

The technical team includes staff with expertise in the following areas: \* Software development\* Quality Assurance\* Information Security\* Networking\* Systems Administration \* Database Administration \* Data Warehousing\* Website management\* Operations monitoring

#### Chief Technical Officer (CTO)

The CTO is the executive responsible for the technical operations of the SRS and for overseeing technical staff. Oversees technical team. Oversees ongoing registry technical operations. Collaborates with the information security officer enforces security policies. Ensures compliance with best practice standards such as iso, ietf and icann consensus policies regarding registry operations. Seeks system certifications, ensures technical policies and procedures are enforced. Ensures compliance with right protection mechanisms and abuse mitigation policies at the technical level. Acts as technical Abuse Point of Contact. Responsible for selection of hardware and software for registry operations. Oversees testing procedures including regular failover testing. Reports to the CEO.

#### Information Security Officer (ISO)

The Information Security Officer is responsible for identifying, developing, implementing and maintaining processes across the organization to reduce information and information technology risks. Also responds to incidents, establishes appropriate standards and controls and directs the establishment and implementation of policies and procedures. The ISO is responsible for information-related compliance and ensures security policies are kept up-to-date and followed by staff. Reports to the CTO.

#### Network Operations Manager

Manages network operations and network management systems and maintains the system architecture once established. Maintains computer hardware and network infrastructure for the registry. Oversees system administration functions, hardware configurations, Virtual Private Network, firewall and load balancer rules. Responsible for maintaining secondary failover connectivity and database backup architecture, all network connectivity and backup power supply. Identifies potential issues with computer systems. Introduces and integrates new technologies into existing data center environments. Performs routine audits of systems and software. Answer technical queries at tier three levels. Responsible for security. Responsible for documenting the configuration of the system. Troubleshoots any tier three problems. Performs system performance tuning.

Maintains the standards for server installations and applications. Manages security alerts and security incidents. Ensures best practices for data management. Reports to the CTO.

#### Network Engineer 1

The Network Engineer manages all aspects of network engineering and maintains computer hardware and network infrastructure for the registry. Performs system administration functions, maintains and updates switch configurations, Virtual Private Network, firewall and load balancer rules. Responsible for maintaining secondary failover connectivity, all network connectivity and backup power supply. Monitors hardware systems for health, troubleshoot errors, initiates backup hardware and installs new hardware as necessary. Analyzes system logs and identifies potential issues with computer systems. Introduces and integrates new technologies into existing data center environments. Performs routine audits of systems and software. Performs backups. Applies operating system updates, patches and configuration changes. Installs and configures new hardware and software. Adds, removes, or updates user ssh, sftp, account information, reset passwords, etc. Answers technical queries at tier three levels. Manages security. Documents the configuration of the system. Troubleshoots any reported problems. Responsible for system performance tuning. Ensures network infrastructure is up and running. Ensures licenses are paid for and up to date. Maintains the standards for server installations and applications. Performs Security Alerts Management. Performs Security incident management. Checks for security breaches. Ensures best practices for data management. Reports to the Network Operations Manager.

#### Network Engineer 2, Network Engineer 3

Implements tasks assigned by senior technical management including: internal LAN, monitoring, troubleshooting and technical Help Desk management. Responsible for keeping the registry system functioning smoothly. Works with the remaining technical staff to provide 24-hour coverage. In addition to sharing on-call duties in case of an emergency or other urgent need, the network engineers bring skills that ensure efficient and secure operation of the NOC. Reports to the Network Operations Manager.

#### Espresso Application Developer (SRS, EPP)

Manages all duties relating to the application (software) layer. Responsible for compliance with ICANN/IETF system requirements. Develops the EPP schema Oversees

system/storage administration, database operations and synchronization. Responsible for development and maintenance of technical support for rights protection mechanisms and abuse prevention and mitigation. Monitors health of application systems, troubleshoots errors, keeps applications up to date, installs replacement software as necessary. Installs and upgrades the SRS systems and application tools. Allocates system processing and storage and plans future requirements. Creates primary storage structures. Maintains and adds primary objects. Develops and modifies the database structure to keep with best practice. Enrolls users and maintains system security. Ensures compliance with vendor license agreement. Monitors and optimizes the performance of the SRS. Plans for backup and recovery of database information. Maintains archived data. Backs up and restores the database. Contacts external vendors for technical support. Reports to the CTO.

#### Espresso Application Developer 2, 3

Supports the Senior platform developer. Installs and upgrades the SRS systems and application tools. Allocates system processing and storage and plan future requirements. Creates primary storage structures. Maintains and adds primary objects. Develops and modifies the database structure to keep with best practice. Enrolls users and maintains system security. Ensures compliance with vendor license agreement. Monitors and optimizes the performance of the SRS. Plans for backup and recovery of database information. Maintains archived data. Backs up and restores the database. Contacts external vendors for technical support. Reports to the CTO.

#### Database Developer 1

Works under the Network Engineer(s). Writes and modifies databases to ICANN's specifications. Ensures health of registry databases, including backup and redundancies. Develops and modifies the data base structures to comply with best practices as set by Network Engineer(s). Defines system requirements by consulting data administrators and system users about the types of information needed. Determines how data should be organized, who should have access to different data and how it should be displayed. Designs and develops data models and database architecture. Constructs, installs and tests the database system. Write manuals or explain database's function. Consults with others to assess the system performance and make modifications as required. Modifies existing databases, as user needs change. Finds faults in programs. Prepares reports on databases. Customizes databases for specific

needs. Trains users and provides technical support. Reports to the CTO.

#### Database Developer 2

Works under the Network Engineer(s). Writes and modifies databases to ICANN's specifications. Ensures health of registry databases, including backup and redundancies. Develops and modifies the data base structures to comply with best practices as set by Network Engineer(s). Reports to the CTO.

#### Database Administrator 1

Works under the Network Engineer(s). Modifies databases to ICANN's specifications. Ensures ongoing health of registry databases, including backup and redundancies. Modifies the data base structures to comply with best practices as set by Network Engineer(s). Installing and upgrading the database server and application tools. Allocating system storage and planning future storage requirements for the database system. Creating primary database storage structures (tablespaces) after application developers have designed an application. Creating primary objects (tables, views, indexes) once application developers have designed an application. Modifying the database structure, as necessary, from information given by application developers. Enrolling users and maintaining system security. Ensuring compliance with database vendor license agreement. Controlling and monitoring user access to the database. Monitoring and optimizing the performance of the database. Planning for backup and recovery of database information. Maintaining archived data on tape. Backing up and restoring the database. Contacting database vendor for technical support. Reports to the CTO.

#### Database Administrator 2

Works under the Network Engineer(s). Modifies databases to ICANN's specifications. Ensures ongoing health of registry databases, including backup and redundancies. Modifies the data base structures to comply with best practices as set by Network Engineer(s). Reports to the CTO.

#### Registrar Customer Service - Technical 1 & 2

The technical Registrar Customer Service responds to technical Help Desk inquiries and is the first line to address any technical issues raised by Registrars. They also perform QA activities. The Registrar Customer Service Technical staff assists Registrars with connectivity, application use issues and escalates issues to senior staff according to tiered escalation procedures. Reports to the

CTO.

#### Vice President for Client Services

The VP of Client Services is the epicenter for client activity. Manages key client relationships and consults with clients and Minds + Machines to develop joint strategies. Coordinates with other staff within the organization to ensure that client goals are achieved. Works with the client initially for planning, policy creation and reporting; during the start-up phase, will be primarily tasked with coordinating the various marketing and public relations launch efforts; finally, during steady-state operations, functions as the primary link between the Client and Minds + Machines. The VP of Client Services has excellent communication skills, both written and oral; an ability to think analytically; a grounding in the domain name industry; and the ability to handle high-pressure projects. Has strong project management experience. Has responsibility for keeping Minds + Machines aware of the priorities of the client and the relevant stakeholders on an ongoing basis and assisting the client with getting any support needed from Minds + Machines. Reports directly to the CEO.

#### **Outsourced**

##### Network Architect

Initial system architecture design and build is done by an expert Network Architect. This person leads architecture and design efforts for the organization, provides technical and architectural direction to application teams coordinates within the organization to create registry engineering tools necessary to ensure successful build and implementation of the Registry, promotes shared infrastructure and applications to improve information flows, enhance technical integration and reduce costs.

*The Ombudsperson* will represent the public's point of view and interest to the Board of M+M London. The Ombudsperson will function as a mediator in accordance with the dot LONDON Complaint Resolution Service, and in addition will be encouraged to publish thoughts and opinions on the dot LONDON web site. The Ombudsperson should be certified or recognized by a reputable ombudsperson's organization. A general knowledge of Internet issues is preferred. The

Ombudsperson is independent and reports directly to the Board.

### **Tucows (Secondary Failover Facility) Staff**

Tucows employs four Senior Technical Support Specialists who have an elevated understanding of the systems and the various individual customers and custom configurations as well as the ability to perform deep diagnostics using elevated read-only access to systems.

There are eight fulltime Monitoring Analysts with a mix of Senior and Junior levels. These Monitoring Analysts work in a modified 24-hour, 4-week schedule in 8-hour shifts with overlaps maintaining a full 24-hour/365-days a year coverage. In addition to maintaining 24-hour coverage, the Monitoring Analysts' core responsibility is to view system health and react to alerts and early warning signs to address issues before they become service-impacting. When issues arise, Monitoring Analysts attempt to correct the issues. If this fails, it is their responsibility to escalate to the appropriate technical on-call teams.

Tucows employs nine Systems Administrators with a mix of Senior, Junior and Team Leads levels. Systems Administrators work a mix of office hours from 6am to 6pm EST. Systems Administrators share pager duty and respond within 15 minutes of being paged by Monitoring Analysts to address technical issues relating to network infrastructure, firewall, load balancer, IP networking, server and storage infrastructure to operating systems and all Tucows-developed software. Network Engineers work within the Systems Administrators' team and are responsible for all network infrastructure and IP Internetworking.

Tucows employs two dedicated Security Specialists responsible for addressing and preventing abuse-related issues including domain hijacking, credit card fraud, messaging abuse, domain abuse, DoS/DDoS as well as putting in procedures and processes to address various security auditing and compliance best practices.

The Operations Manager is the next point of escalation and is responsible for all Systems Administrator staff including Networking staff.

The Director of IT Security & Compliance is responsible for all Monitoring Analysts and Security Specialists and is the

next point of escalation. The Operations Manager rotates escalation coverage with the Director of IT Security and Compliance.

The Vice President of IT Operations is responsible for all IT Operations *and* is the last point of escalation.

### **NCC-Data Escrow**

NCC Escrow International Limited (data escrow) has over 800 employees worldwide with escrow as its core service offering. For the registry data escrow program, NCC has formed specific teams to manage the critical functions of serving as the primary escrow agent for the new registry operators. There will be four functional teams making up the ICANN registry escrow organization inside NCC:

1. Account Management: Three dedicated key account managers from one hundred available
2. IT Operations: Four dedicated engineers from a thirty-strong team
3. Finance: Two dedicated financial personnel from a thirty-strong team
4. Senior Management: Three geographically located senior managers

### **PCH**

Packet Clearing House (PCH) (DNS and DNSSEC) The DNS function is outsourced to PCH. PCH provides the necessary staff for the DNS function.

PCH has two staff members with operational monitoring responsibility in the Kathmandu, office, three in the Berkeley office, and one in the Buenos Aires office. There is a 12:45 difference between the time-zones of Berkeley and Kathmandu, work hours are staggered to make sure that there is always someone online and available to work a trouble-ticket.

### **PCH's STAFF**

- Executive Director
- Research Director
- Systems Director
- Software and Network Manager
- Internet Analyst
- Provisioning Engineer
- Peering Coordinator
- Outreach Manager

- Senior Systems Engineer
- Office Manager
- Internet Infrastructure Specialist

#### VOLUNTEERS

- VoIP engineer
- Programming and database analyst
- Project coordinator
- Exchange point database manager
- Security policy developer