



Capability **Statement**

Integrated Building Systems

BMS / ELV Systems

Knowledge Engineering

1. Introduction

NG Global is a specialist organization, providing technical consultancy in SAS and ELV systems. The success of our technical services owes much to our ability to meet the needs of our customers through our highly qualified and experienced engineers in Airport Construction with SAS & ELV systems. In addition to our full time technical engineers, we have a pool of expert resources from the Airport Industry in UK to support our customers by back end office review, value engineering, planning and guidance.

Our high profile skills and 'hands on' approach have been demonstrated in our current Airport project in Dubai AX 324, where NG Global engineers are part of the SAS interface team in AX 324. We are involved on this project full time at the site in SAS and ELV coordination, conducting workshops with various different vendors on close outs, ICD's and facilitating the total Airport wide integration.

NG Global reputation continuous to be recognized in Value engineering, efficient procurement, contracts with vendors and project management of SAS and ELV systems. NG Global facilitates to build technologically advanced and 'Safe' Airports all around the world.

2. Knowledge Engineering

Airports and their associated ancillary buildings are compact, heavily serviced and designed on a 'fast track' basis because of the clients need to be first to market with their products. We understand this and have developed a business with dynamic, motivated people focused on smarter and more efficient ways of securing certainty of product to market. We have the people, the attitude and the processes to make your needs a reality.

With this blend of skills, our use of leading edge technology and best practice along with specific experiences, N G Global have the confidence which success breeds. Our key strengths are our:

- Management skills, ensuring speedy delivery on time to clients full specification;
- Technical skills, to develop the concept into a facility;
- Supply chain knowledge within the Middle East and Worldwide;
- Risk identification, not just in the build, but in the whole development - your risks;
- Robust design resources;
- Flexibility to deliver innovative solutions;
- Flexibility to change, the right attitude;

As a business geared to continuous improvement we are confident, capable and keen to develop our ideas with you.

Overleaf we have provided outline details of our company, our systems and our portfolio.

NG Global is a registered company in Dubai Internet City, Dubai. Our office is located in Villa No.7, Boutique Office in Dubai Internet City. NG Global consists of University Graduate Engineers from all over the world with Electronics, Automation and IT background. Each of us is equipped with various SAS/ELV Skill sets and over 20 years of experience.

A key to our success is our strategic location, as Dubai located midway between Far East and Europe, proximity to the talents from sub continent and a pool of resources from all over the world, makes our offering most cost effective and at the same time maintaining a high quality services and performance.



Dubai Internet City main entrance.

Professionals

NG Thomas



Thomas - Director

Thomas is an accomplished and proactive Systems Specialist in Intelligent Technology for Buildings & Infrastructure Controls. Thomas has a proven track record in all Types of technology solutions bringing tangible cost savings and benefit to the customers. He has worked with leading consultants such as Atkins, Norr Group in the early stage of design development of a master specification for Integration of Multi Vendor Systems using state of the art Open Protocols, which is ideal for a progressive construction sites like Airports. His recent projects are Pre-bid consultancy for Dubai Airport AX 324, Doha Airport, Design of Dubai Municipality Control Room and the Atlantis Hotel & Resort in the Palm Island, Dubai. His experience in Industrial and Process Control Automation combined with Building Automation brings unique hybrid and high quality solutions for large projects.

Professionals

Melvin Pereira

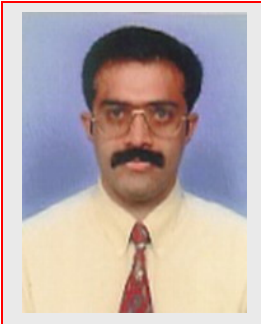


Melvin Pereira - Team Leader SAS & IT Networks

Melvin is the team leader of NG Global with Thermo at AX 324. He has been with AX 324 project for almost 2 years since July 2004, from pre-bid consultancy stage to currently at the SAS/ELV Integration team at the site. He has gained a very good technical knowledge of all SAS and ELV Systems at AX 324. Melvin was instrumental in developing the 'e-DID' or the Electronic Detailed Interface Document, which serves as the common spread sheet for the entire coordination of SAS/ELV Integration at the AX 324, providing status on SAS/ELV for client, consultants, subcontractors and vendors. Melvin is a firm believer in using this 'e-DID' at the earliest possible involvement at the design stage of airports which will be a valuable asset in managing the design, specification and development cycle of specialized ELV/SAS Systems.

Professionals

Mathew John



Mathew John - Intelligent Building Systems

Mathew is the leader of NG Global's Intelligent Building Systems & ELV Solutions and has 17 years of experience in the planning, design, procurement, implementation, commissioning, and operation of all of the technology systems typically found in the building environment. He has helped NG Global develop an innovative approach to the design, specification, procurement, and implementation of BMS & ELV systems whereby client goals and interoperability are achieved. He has a track record of major projects such as Salalah Airport in Muscat, Royal Flight, British Embassy, Muscat palace, Royal Offices, Grand Hyatt, Grosvner House Hotel in Dubai, Al Ghurair retail City Development.

Professionals

Manoharan



Manoharan - Manager, Integrated BMS

Over 20 years of experience in BMS, DDC Controls, SCADA and Integration with other Vendor systems. Proficient in protocols such as BACnet, ModBus, LONworks, Profibus and well experienced in Integration of 3rd party systems such as Fire, Security etc. with BMS. Experience in SIEMENS & TAC BMS controls, Citect SCADA, Industrial PLC's such as SAIA Burgess, Schneider. Engineering and Execution experience of control & monitoring system for BMS, Home Automation and Lighting control Systems. Involved some of the most land mark and prestigious projects like, Dubai Burj Al Arab, Wafi City -BMS, Dubai Intl Airport Terminal 2 & Concourse 1, Cargo Complex, Dubai Internet City, Chamber of Commerce Building-, Dubai Festival City etc.

Professionals

Alejandro N. Nodado



Amar Aurangabadkar - Project Engineer (BMS, CCTV, SACS, FIRE)

Amar has over (3) three years experience with SIEMENS BMS and is well versed with the Techno commercial matters on projects. He is a Morley-IAS certified technical executive. Amar also has commissioning experience for ELV systems such as BMS & security systems. Having worked in prestigious projects in India such as the BMS for Hyderabad Convention Center, Jayabheri Silicon Towers, Vimta Labs, GVK BIO Phase, Aurbindo-Units and HSBC Bank Amar brings experience pertaining to Installation & Commissioning of BMS, Fire Alarm System, Access Control System, CCTV, & VESDA systems.

Professionals

Ameen Abu Bhakri



Ameen Baki - HVAC Controls & BMS Coordination.

Ameen specializes in HVAC Controls and BMS. His expertise is in the HVAC aspect of the BMS system, which is vital in this part of the world. He provides expert advise on 'Comfort Controls' using Variable Drives and Variable Air Volume (VAV) systems, providing high quality comfort as well as substantial energy savings for the end user. Due to the advent of open protocols by multi vendors, he advices optimum procurement by packaging pre-fitted controls with HVAC equipments, thus reducing considerable coordination during implementation while maintaining single responsibility on the performance of comfort conditions. He is a graduate in Engineering from Damascus University in Syria

Professionals

Mel Bryan Z. De Guzman



Mel Bryan Z. De Guzman - BMS Service Engineer.

Graduate Engineer in Electronics and Communications Engineering from University of Santo Tomas, Phillipines. Experienced in BMS commissioning, loop checking, Testing and supervision at Site. Also familiar with regards to fiber optics termination, and operation of soft switches in telecommunications. Worked in Siemens, commissioning CCTV system, Access Controls for the American hospital Dubai, Platinum Yacht, Jebel Ali FZ. Currently working in NG Global as BMS Testing and Commissioning Engineer for The Burj Tower District Cooling Plant.

Professionals

Irfan Ahmed



Irfan Ahmed - Controls Service Engineer.

Graduate Engineer in Information Science and Technology from Bangalore, India. His knowledge in Controls and IT helps in troubleshooting the BMS networks. Experienced in Loop checking in PLC's and DCS systems (Oil and Gas). He is currently working in NG Global as BMS Testing and Commissioning Engineer for The Burj Tower District Cooling Plant.

Project Experience

Dubai International Airport Expansion (AX324)



NG Global has over now 2 years of experience with AX 324, started our involvement with contractors at the pre-bid in July 2004. During pre-bid, NG Global was involved in technical review of specification of SAS/ELV Systems, raising RFI's, coordination with multi vendors, techno-commercial evaluation. NG Global is currently in Thermo SAS/ELV Integration team at AX 324 site, facilitating workshops and coordination meetings, interfacing with client, consultants and various package managers and vendors. Our team developed a key tool in the Interface Coordination 'e-DID' Electronic Detailed Interface Document, which is used at site by client, consultant, subcontractors and various parties involved in the project.

NG Global provided dedicated technical engineers with SAS/ELV expertise to facilitate the identification, rationalization and close out internal and external AX project, interface through coordination meetings, workshops, interface documentation and final sign-off.

Project Experience

Burj Dubai



Developer : EMAAR
 Main Contractor : Samsung/Besix/Arabtec
 MEP : EVH ETA/Voltas/Hitachi Plant

When completed in 2008, Burj Dubai will hold the record in all four categories recognized by the New York-based global authority, Council on Tall Buildings and Urban Habitat. These records are: highest structure, roof, antenna and occupied floor. The 160-floor tower, designed by architect Adrian Smith for Chicago-based Skidmore, Owings and Merrill (SOM), is inspired from the geometrics of the desert flower and the patterning systems of Islamic architecture. At approximately 2,625 feet (800 meters) tall, it is just 15 feet (5 meters) short of a half-mile.

NG Global is currently providing BMS Expertise for EVH. NG Global was also involved with EVH at the Pre-bid stage in detailing the scope and vendor proposals.

Project Experience

New Doha International Airport, Qatar



Our services in DOHA International Airport included

- Pre Bid Consultancy
- Reviewing the specifications and requirements for the project.
- Selection of the vendors and specialists for the project.
- Detailed study of various specifications, vendors, submittals and drawings, to suggest the best possible solution that fits the requirement.
- Value Engineering

Project Experience

Hyderabad International Airport, India



- Pre Bid Consultancy
- Reviewing the specifications and requirements for the project.
- Selection of the vendors and specialists for the project.
- Detailed study of various specifications, vendors, submittals and drawings, to suggest the best possible solution that fits the requirement.
- Value Engineering

Project Experience

Atlantis - The Palm, Dubai



- Pre Bid Consultancy
- 4 Kilometer Span Water park
- Proprietary systems interfacing with the BMS system
- Value Engineering
- Estimation for the ELV systems
- Detailed study of systems, vendors and submittals to provide the best solution to the MEP contractor.

Project Experience

One Central Park, DIFC, Dubai



- Pre Bid Consultancy
- 80 Floors
- Proprietary systems interfacing with the BMS system
- 30 Floors of Office Space
- 1/2/3 Bed Apartments
- Penthouses
- Home Automation systems
- Very extensive integration in the penthouses between home automation, structured cabling, building management system, access control, Audio video and the CCTV.

Project Experience

Ritz Carlton Hotel, DIFC, Dubai



- Pre Bid Consultancy
- Vendor Evaluation / Systems Evaluation
- Opening 2008
- Consists of Serviced apartments and Unserviced Apartments
- Value Engineering done on the systems

Project Experience

Harbor Plaza, Dubai Festival City, Dubai



- Pre Bid Consultancy
- Intercontinental Hotel and Managed Apartments
- Includes all the ELV Systems in a Hotel and Residential Apartments
- Spec from consultant and Intercontinental Hotel Guideline.
- First Project within the Zone 2B of the Festival City campus.
- Campus wide BMS for integration and Easy Facility Management.

6. Differentiating N G GLOBAL

NG Global's approach involves total integration from project development, to design/engineering, through procurement, construction, facility start-up and facility turnover. Our philosophy is designed to safely drive fast-track projects on time and within budget. To accomplish this we involve our construction professionals and specialists in the process as soon as possible. This incorporation of management services into the design phase increases the certainty of project success in terms of quality, cost, and schedule. They advise on constructability, cost and schedule, which lead to biddable designs and constructible projects.



Procurement

Procurement is more than just tendering and placing contracts at the lowest cost. It is a process which is inherently tied to every stage of the Project to **ADD VALUE** delivered by dedicated procurement specialists.

NG Global:

- procure as part of your Project Team
- undertake global research and procurement
- assist in establishing the optimum procurement strategy to 'excite' the trade
- fully understand and operate within the Middle East and Global markets
- identify the right Contractors to ensure best value for money
- believe in the principles of Supply Chain Management and the Early Involvement of Trade Specialists.

Subcontractor Procurement

- Pre-tender Questionnaire to Tenderers
- Tender Interview
- Issue Tender Documents
- Answer Tender Queries
- Assist in Tender Analysis
- Tender Interviews

Feasibility/Preliminary Stage

- Client Liaison
- Communication Presentation (to keep client informed)
- Establish Initial Client's Brief
- Carry out Reliability Analysis
- Cost Plan
- Value Engineering
- Feasibility Study
- Scheme Design and Preliminary

Construction Stage

- Continued Design Team Liaison/Leadership
- Analyse/Comment on Contractor's Method Statements
- Prepare IST (Integrated System Test) for all
- Witness Commissioning
- Check O&M Manuals
- Attend Regular Site Meetings
- Option for Resident Engineers
- Carry out Regular Snagging
- Detailed Handover
- Aftercare



Value Engineering

NG Global operates a Value Management/Value Engineering service whose remit is to interrogate, challenge and seek opportunities for the Client to achieve Best Value.

As part of our management services and our Offer is the opportunity to benefit from this Service. It can be focused on key areas or given a roaming remit - the advice can, of course be ignored - but we would rather play our part.

Detailed Design and Documentation

- Client Sign-Off
- Information Freeze
- Design Team Liaison
- Design Out Single Points of Failure
- Detailed Design and Documentation
- QA Check of Detailed Design
- Template Design Documentation

NG Global:

- Act as facilitator (if required)
- contributes to the Value Engineering Team
- can integrate this with Life Cycle Costing exercises
- targets key areas and issues
- values alternative materials
- remove unnecessary cost without loss of function or value.