



New projects

Metro Project
in Ahmedabad

Water Pipeline job
in Tanzania

Mine Road project
in Liberia

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TUNNEL TRIUMPH

Afcons is well on course with Chennai Metro project, completing a major chunk of activities ahead of schedule | Page 7

*'MAKE
award
belongs to
all of us'*



We rounded off last year on a high, with a strong acknowledgement for our Knowledge Management efforts in the form of the MAKE award. The recognition assumes significance as Afcons has been recognised as a knowledge enterprise at all three levels – Global, Asia and India.

We have got here only because we are driven by strong teams of motivated individuals who dedicate themselves to learning. Each one of us has contributed to gathering and disseminating knowledge. We are the minds and hands that make Afcons a learning organisation.

Our Knowledge Management team has devoted itself in building the robust asset of Afcons' knowhow. They have ensured KM is ingrained in our organisational culture and is the driving force behind making us a knowledge enterprise.

I would like to congratulate each of you for the MAKE award. We must ensure that this is just the beginning. Let's bring more glory home, each year.

K Subrahmanian

Making **Headlines**

Bharat Jyoti Award for Mr SG Paretkar



Mr SG Paretkar was presented the Bharat Jyoti Award by India International Friendship Society on December 21, 2016, in New Delhi. Mr Paretkar was chosen for this honour based on independent assessment. He received this award for meritorious services, outstanding performance and remarkable role at a seminar on economic growth and national integration.

ALEP Pkg II achieves 7.022 mn safe man hours



Uttar Pradesh Expressway Industrial Development Authority (UPEIDA) has awarded Afcons a certificate of appreciation for accomplishing 7.022 million safe man hours worked without Lost Time Injury (LTI) between the period of August 03, 2016 and January 31, 2017 at Package 2 of Agra-Lucknow Expressway Project.

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EDITORIAL

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AFCONS MAKEs IT POSSIBLE!

The Shapoorji Pallonji Group company receives highest recognition in Knowledge Management



Mr R Girdhar (left) and Mr Deepak Gaikwad (third from right) receive the MAKE India Award with members of KSG at the KM Summit, in Hyderabad, in Feb 2017

Afcons Infrastructure Ltd made a mark in the field of Knowledge Management (KM) by becoming one of the few Indian infrastructure construction companies to be awarded the prestigious Most Admired Knowledge Enterprise (MAKE) Award. The announcement came as triple delight for the EPC infrastructure arm of the Shapoorji Pallonji Group as it received the Global, the Asian and the India awards.

The award is considered the pinnacle in the field of Knowledge Management. What makes this achievement special is that an organisation cannot nominate itself - it can only be chosen by external experts.

The MAKE Award is determined by Teleos, UK, in association with the KNOW Network, UK. Teleos is an independent research organisation focused on the Knowledge Economy. Panels of Fortune 500 senior executives and internationally recognised Knowledge Management / Intellectual Capital experts select the winners based on their ability to convert intellectual capital into stakeholder/ shareholder value, separately for each category.

Afcons received the Most Admired Knowledge Enterprise Award (MAKE) at three levels - as a Global Independent Operating Unit (IOU), as a Most Admired Knowledge Enterprise in Asia and at the national level. The MAKE India Award is presented in association with

MAKE Award is considered as the highest recognition in the field of KM and organisations cannot apply for the award - they can only be nominated by others. It is a matter of great pride that we are among the few companies from India to be bestowed with this recognition

— R Girdhar
Executive Director – Technical,
and the Head of Knowledge Service Group



PAT ON THE BACK

The Asian MAKE award citation states – The 2016 Asian MAKE panel has recognised Afcons for transforming enterprise knowledge into shareholder/ stakeholder value. This is recognition of Afcons' spirit to ensure Excellence in Execution.

THE EVALUATION PARAMETERS

The eight knowledge performance dimensions which form the MAKE framework:

- Creating an enterprise knowledge-driven culture
- Developing knowledge workers through senior management leadership
- Developing and delivering knowledge-based products/ services/solutions
- Maximising enterprise intellectual capital
- Building an environment for collaborative enterprise knowledge sharing
- Creating a learning organisation
- Delivering value based on stakeholder knowledge
- Transforming enterprise knowledge into shareholder/ stakeholder value

THE ELITE LOT

Winners of the 2016 Global IOU MAKE Award*

- **Afcons Infrastructure (Shapoorji Pallonji Group) (India)**
- Hong Kong Police Force (Hong Kong SAR Government, China)
- Korea Water Resources Corporation (Republic of Korea Government) (S. Korea)
- Nalco Water (Ecolab) (USA)
- Samsung SDS (Samsung Group) (S. Korea)
- Singapore Armed Forces (Republic of Singapore Government) (Singapore)
- Singapore Power (Temasek Holdings) (Singapore)
- Tata Consultancy Services (Tata Group) (India)
- Tech Mahindra (Mahindra Group) (India)
- The Titan Company (JV Tata Group and Tamil Nadu Industrial Development Corporation) (India)
- US National Aeronautics & Space Administration (United States Government) (USA)

Winners of the 2016 Asian MAKE Award*

- **Afcons Infrastructure (Shapoorji Pallonji Group) (India)**
- Arup Hong Kong (Hong Kong SAR, China)
- BINUS University (Indonesia)
- COFCO Nutrition and Health Research Institute (China)
- eClerx Services (India)
- Hong Kong Police Force (Hong Kong SAR, China)
- Infosys Ltd (India)
- Korea Water Resources Corporation (Republic of Korea Government) (S. Korea)
- New Oriental Education & Technology Group (China)
- Samsung SDS (Samsung Group) (S. Korea)
- Singapore Armed Forces (Government of Singapore)
- Tata Consultancy Services (Tata Group) (India)
- Tech Mahindra (Mahindra Group) (India)
- Titan Company (JV Tata Group and Tamil Nadu Industrial Development Corporation) (India)
- Toyota (Japan)
- Wipro Ltd (India)

Winners of the 2016 India MAKE Award*

- **Afcons Infrastructure Ltd (Shapoorji Pallonji Group)**
- HCL Technologies
- Infosys Ltd
- Tata Consultancy Services (Tata Group)
- Tech Mahindra (Mahindra Group)
- Titan Company (JV Tata Group and Tamil Nadu Industrial Development Corporation)
- Wipro Ltd

*List of winners in alphabetical order



Mr R Giridhar, Mr Deepak Gaikwad and Mr Rudolf D'Souza at the MAKE Asia Award ceremony, in Hong Kong, in Jan 2017.

the Confederation of Indian Industry (CII).

Speaking about the achievement, Mr R Giridhar, Executive Director – Technical, and the Head of Knowledge Service Group (KSG) explained how this honour is special. “MAKE Award is considered as the highest recognition in the field of Knowledge Management and organisations cannot apply for the award - they can only be nominated by others. It is a matter of great pride that we are among the few companies from India to be bestowed with this recognition. The overwhelming support of all the Afconians has brought us this recognition and we seek your continued support.”

The Knowledge Management journey at Afcons began in 2011, when the KM and IT teams joined hands to launch the in-house designed KM portal, GNOSIS. The platform was strengthened over a period of time with the addition of offline processes like Tech-Tonic, Lessons Learned, Process Videos, Expert Podcasts and GNOSIS Chats to name a few.

GNOSIS was well received right from the beginning, with Afconians participating in KM activities enthusiastically by sharing knowledge. Business Unit heads provided direction; project controllers helped the KM team to identify critical activities; project coordinators scheduled visits and project managers ensured participation. KM Ambassadors at every project site volunteered with their time and took efforts to conduct awareness sessions and trainings.

Deepak Gaikwad, the team leader of KSG, attributed the success of GNOSIS to Afconians. “We follow a cycle, wherein knowledge is gathered from projects, reviewed by domain experts, documented on the GNOSIS portal, and most importantly, disseminated. There is systematic co-ordination between site members and the KSG team and their combined efforts have enabled us to have an organised Knowledge Management set up. We regularly conduct activity-based classrooms at sites and HO for processes and kick-off workshops at sites before projects begin based on the knowledge we have gathered. Our activity-based portal is available to each employee 24X7.”

MAKE Award is decided by TELEOS, UK, an independent research organisation focused on the Knowledge Economy, in association with the KNOW Network, UK. A panel of Fortune 500 senior executives and internationally recognised knowledge management/ intellectual capital experts select the winners

The MAKE Award has come as a boost to the vision Afcons has set for itself - that of becoming a champion EPC player. Just six months ago, the Knowledge Management and Technical Training teams have been combined to form the Knowledge Services Group (KSG). The Knowledge Services Group has been tasked with building technical capability, capturing knowledge and disseminating information, in line with the Afcons' promise of 'Excellence in Execution'.

Mr K Subrahmanian, Vice Chairman and Managing Director, Afcons, dedicated this award to the KM team. “I am happy for the entire KM team for their stupendous effort in getting nominated, and, finally being awarded at a global Knowledge Management platform. KM is being diligently practised within Afcons and this learning culture will prepare us to execute far more complex projects in future,” he said.

All these efforts are aligned with Afcons' mission of becoming the undisputed champion EPC player. This recognition is a motivator to continue this journey and aim at being not just the Most Admired Knowledge Enterprise in Asia, but also globally year after year.

'Afcons to build India's first underwater Metro'

The SP Group company is set for a new milestone by tunnelling underneath river Hooghly for the East-West Metro Project in Kolkata. Afcons' head of Urban Transport business unit, R Anantakumar, shares his thoughts about the KMRC project



Pic: Saurav Banerjee

The underwater tunnel will connect Howrah (in photo) with Sealdah, which are two of the busiest railway stations in the world

Afcons is the first Indian company to build Metro infrastructure under water in Kolkata. What made you take up this unique challenge?

Afcons has played a significant role in nation building by consistently delivering iconic and technologically challenging projects in India and abroad.

It is the first Indian company to construct an underground Metro tunnel using top-down methodology without any foreign JV in New Delhi (Barakhamba Road Metro Station). Afcons is also the only company, in India, to qualify for Metro tunnel construction using TBMs on its own. It is constructing India's biggest underground Metro station at Chennai as part of Chennai Metro project. Afcons has consistently shown the gumption to tackle complex projects, and we're excited in playing a leading role in the East-West Metro Project in Kolkata. We are in the process of building an underwater tunnel below the bed of Hooghly River for the Kolkata Metro Rail Corporation Ltd (KMRC). Afcons will be the first Indian company to build underwater Metro infrastructure facility.

How is building an underwater tunnel different from building an underground tunnel?

In general, underground tunnelling is a very challenging task but underwater tunnelling adds more complexities and risks. Due to working underwater, the risk of water ingress increases and impact due to geological surprises is also very high. Once the tunnelling starts under the river bed, it should not stop under any circumstance. In underwater tunnelling, bore has to be dug much deeper due to possibility of water inflow. This requires very high level of detailing, precision and preparation.

Is the underwater Metro tunnel under the river Hooghly going to be modelled over similar projects in the world, like the Thames Tunnel

We have a team of highly-experienced tunnel crew on board, should an entry into the cutting chamber be required under high hyperbaric pressures during river driver. In the remote possibility of river water ingress, the TBM is designed to shut down like a submarine, for safe evacuation.

— R Anantakumar
EVP & BU Head,
Urban Transport



or Sydney Harbour?

Each underwater crossing has its own challenges and different geological features. So, one cannot really model a crossing based on what has already been achieved. We have, however, looked for precautions taken and problems faced in different river crossings as well as projects that have been executed in extremely high water bearing conditions and applied this to our own geological situation that we will encounter.

Have any innovations been made as part of this project?

We have done a number of innovations and have improved upon numerous processes while planning the project. Due to site constraints the TBM has to be driven through Howrah Station in advance. This is a delicate operation where the TBM can encounter

difficulty in crossing the diaphragm walls. We designed a "Soft Eye" of styrofoam replacing M-40 concrete. This has worked extremely well. This is a first design of its kind attempted in India by our in-house design engineers.

At Afcons, we follow the culture of continuous improvement through innovation.

What took so long for India to come up with a project of this nature?

The experience of the existing Metro corridor in Kolkata and the success of the Delhi Metro network contributed to the sanctioning of the second phase of the Kolkata Metro that will have the underwater Metro tunnel. The tunnel, which runs underneath river Hooghly, is aimed at connecting Howrah and Sealdah railway stations, two of the busiest railway stations in the world.

This is a momentous feat in terms of Metro infrastructure. What have been the other highlights in India's Metro infrastructure space before this?

First thing that comes to mind is the sheer scale of projects being envisioned. The gap between concept and execution is shrinking rapidly. We have incorporated world's latest and best practices in our design and implementation processes thereby delivering savings in time, cost and space. Our engineers have rapidly scaled up their skills to utilise the best practices with minimum gestation.

Metro rail first arrived in India as early as 1984 with the north-south Kolkata Metro. But the rush for Metro infrastructure actually began after its success in Delhi. It was the first time in India that tunnels were constructed for Metro using TBMs. It changed the outlook and future of Metro construction in India. We expect a similar impact with the underwater tunnelling by Afcons.

AWARDS



GREENTECH AWARD FOR TWO PROJECTS

Agra-Lucknow Expressway Package II has received the Gold Award in Construction Sector for outstanding achievement in Environment Management at the 17th Annual Greentech Environment Award 2017 held at Taj Bangalore on February 1, 2017. The award was received by Mr CP Ramesh, Vice President - Operations, and Mr AK Roy, Senior Manager – HSE. The award was presented to AFCONS Infrastructure by Mr Kamleshwar Sharan, Chairman and CEO, Greentech Foundation, in the presence of Mr Ramachandran, Secretary, Ministry of Forest and Environment, and Mr R. K. Dubey, Chief Advisor and Conference Chairman, Greentech Foundation, Former CMD Canara Bank.

IRCON Tunnel Project 2618-T74R (A) has been given Gold Award at the Greentech Environment Award 2017 held on February 1, 2017 in Bangalore. Mr. C.P. Ramesh, Vice President – Operations, and Aarif Mohammad Tantry, Senior Officer – HSE received the award on behalf of Afcons Infrastructure. The award was presented by Mr. Kamleshwar Sharan, Chairman and CEO, Greentech Foundation.

NEW JOINEE

Mr ATUL JAIN, Vice President – Projects

Mr Atul Jain has an experience of over 34 years and has worked with companies like EIL, REC Kurukshetra, Indian Railways and IRCON International Ltd. His last assignment was with Larsen & Toubro Ltd. at the level of Project Director.

NEW PROJECTS

Metro project in Ahmedabad

Metro-Link Express project for Gandhinagar and Ahmedabad (MEGA) Co. Ltd. has awarded Afcons the job of design and construction of underground stations and tunnel for Ahmedabad Metro Rail Project Phase-I. The work includes finishes, excluding PHE, Electrical and HVAC, from East End to East Ramp to East End of Launching Shaft near Kalupur Metro Station. This comprises East Ramp, Twin Bored Underground Tunnel between East Ramp and Kalupur Metro station all cut and cover portion, including two underground stations - Kankaria East and Kalupur Metro Station.



Water pipeline job in Tanzania

The ministry of water and irrigation of the United Republic of Tanzania has awarded Afcons the job of extension of water transmission pipeline from Lake Victoria as part of water supply scheme for Tabora, Nzega and Igunga towns (Package III).

construction of gangra in pit mine road project in Liberia by Arcelor Mittal.

Rail project in Ghana

Ghana Railway Development Authority (GRDA) has awarded Afcons the job to construct single standard gauge railway line from Tema to Akosombo on EPC basis.

Pvt. Ltd. has awarded Afcons and EPC contract for construction of container berth and fisheries harbour at Vizhinjam, Kerala.

Marine job at Kandla port

Kandla Port Trust has awarded Afcons the work of construction of 14th and 16th berths for multipurpose cargo (other than liquid).

Mine road project in Liberia

Afcons has been awarded the job of

EPC contract in Kerala

HOWE Engineering Projects (India)

NEWS

Traffic awareness drive



Afconians from Agra-Lucknow Package IV (Kannauj-Unnao) organised a traffic safety awareness programme, Anurodh. The programme was held in two phases over four days (December 28-30, 2016, and January 12, 2017). This initiative was undertaken after it was found that people from nearby villages were frequenting the main carriageway of the Expressway for walks and to take photographs. The programme made them aware of perils of walking along the stretch because vehicles run at very high speeds. The villagers of all age groups were also informed about the importance of using underpasses and service roads to prevent accidents.

Marathon Men

Three members of the AFCONS family have successfully completed marathons held in Mumbai this year. Akhil Kumar Gupta, Executive Director (Operations), completed the 21-km Half Marathon in 2.35 hours at The Powai Run 2017 held on January 8. Anil Sharma, Executive Assistant to ED (Operations), and Arpit Surana, Manager (Finance), ran the 42-km Full Marathon at the Standard Chartered Mumbai Marathon 2017 on January 15. Mr Sharma completed his run in 5.23 hours, while Mr Surana took 5.44 hours. The extraordinary achievements of our colleagues give us lessons in endurance and grit. They inspire us to take a little time from our packed schedules for our overall well-being. Let's join as one in lauding their achievements!



Akhil Kumar Gupta



Anil Sharma



Arpit Surana

Strategising on Surface Transport

A one-day event, Manthan, was organised by the Surface Transport BU at HO on January 2, 2017. This event was a mini Strategy Conclave and brainstorming session for the Surface Transport BU and various topics related to Level Next targets, Business Procurement and Operations were discussed. The session was addressed by Mr K. Subrahmanian, Vice Chairman and Managing Director. Project managers and planning managers from various sites across the country and all members of the Surface Transport BU at HO attended the session.

HSE best practices seminar

A Practice Sharing Forum on Health, Safety and Environment was held on February 15, 2017, in Mumbai. The forum is a Shapoorji Pallonji Group initiative, which provides platform for professionals across group companies to share best practices. The participating companies included Afcons, SP E&C, Sterling And Wilson, Eureka Forbes Limited, SD Corporation, Forbes & Company Ltd.



Holi celebrations at ALEP Pkg 4 and Tunnel T74R-A sites



Republic Day was marked at ALEP Pkg 4 site

National Safety Day Celebrations

An event marking National Safety Day was held at Afcons headquarters in Mumbai, on March 17, 2017, where Afconians pledged to protect the environment and take care of health and safety needs. The HSE department organised a Health Walk to mark the occasion. This received an overwhelming response from Afconians notwithstanding the blaring sun. The walk was followed by a dance and skit performance by a talented bunch of youngsters of Ice Angels group. Finally, every Afconian reaffirmed the pledge with their signatures.



Afconians take a pledge for safety during National Safety Day celebrations, in Mumbai, on March 17, 2017

HR CORNER

OIL & GAS TRAININGS

Mechanical Static Equipment Design Training Programme

A training programme on Mechanical Static Equipment Design – phase 1 and 2 was conducted in December for the employees of Oil & Gas BU. The objective of the training program was to train the mechanical engineers from the business unit on various aspects (standards / codes, PV Elite Software, Material Selections, etc) of Static Equipment Design.

Presentation Skills

A two-day workshop on presentation skills was organised at Afcons headquarters on February 15-16, 2017. The workshop was conducted by Mr. Vincent D'Silva (external faculty) and was attended by 15 employees of HO and Oil & Gas division.

The workshop was designed to help the participants in making their presentations more effective.

DELEGATION SKILLS

A two-day workshop on Delegation Skills was conducted at Afcons headquarters on January 24-25, 2017. The workshop aimed at enabling managers to understand various aspects of delegation, process of delegation and tools to help delegate effectively, which will help bring out better productivity.



MANAGING PEOPLE AT WORK

The second phase of Managerial Skills workshop - Managing People at Work - was organised at Afcons HO in February and March. The workshop was facilitated by Mr. Sachin Karve (external faculty) and attended by 46 participants from HO and sites.

BEHAVIOURAL COMPETENCY WORKSHOP

Personal Motivation and Interpersonal Skills

A one-day workshop on personal motivation and interpersonal skills was organised at KMRC site on January 14, 2017. The workshop was facilitated by Mr Tarun Biswas (external faculty) and attended by 25 employees of the KMRC site.

Effective Communication Skills

A workshop on effective communication skills was organised at Ennore Project site on January 18, 2017, and at CMRL site in two batches

on January 23 and 24, 2017. The objective of the workshop was to help employees hone their communication skills for interpersonal effectiveness.

Action Orientation and Persuasiveness

A one-day workshop on Action Orientation and Persuasiveness was organised at the Nagpur site on January 21, 2017. The workshop was facilitated by Mr. Prince Grover (external faculty). It aimed at inducing a sense of ownership, accountability and decision making skills within the participants and also help them in proactively exploring new opportunities.

Motivation Leadership and Effective Communication Skill

A two-day workshop on Motivation Leadership and a one-day workshop on Effective Communications Skills was conducted at the Chenab project site in March 2017 by Dr. Vishwanath Lele (external faculty). The workshop aimed at helping the participants develop and hone leadership and motivation techniques to empower themselves and their teams. The aim of effective communication skills workshop was to better the communication skills of the participants for interpersonal effectiveness.

Project Update

RAPID PROGRESS IN CHENNAI

The buzz of activity on the Chennai Metro project has reached its peak. Afcons & TTA are working on four packages of Chennai Metro Phase 1 and extension.

Package 5 is at the most advanced stage, and preparations are on for commercial operation. All statutory testing like EIG, fire and CMRS have been completed in one attempt, and this package is expected to be inaugurated shortly.

In package 1, tunnelling work was done by February 2017. The majority of work on five underground stations is nearing completion. Given the progress of architecture and minor ground work, package 1 is likely to be completed in a year. Package 2 consists of around 2.1 km tunnelling (twin tunnels), of which about 0.9 km is completed. The remaining work is expected to be done by December 2017.

Package 8 comprises construction of diaphragm wall for two stations, launching shaft, retrieval shaft for TBMs and 1.8 km tunnelling (twin tunnels). This is likely to be ready by February 2018.



MAKE Award



Mr R. Giridhar, Executive Director (Technical), and Mr Deepak Gaikwad, Head - KSG, receive the MAKE Asia Award in Hong Kong in January 2017 | Page 3



A L E R T S

→ Afcons now has a dedicated Youtube channel. Scan the code to visit the channel and stay tuned with the latest videos

