




**“Learn from disaster and
prepare for a safer future”
National Safety Week
Campaign 2021**

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**FORUM OF CRITICAL UTILITY SERVICES
A Game Changer in the
Construction Industry**



**The pathway to a resilient
future ...**

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Editorial

It is with great enthusiasm we present our First Newsletter Issue 01 of FOCUS- Forum of Critical Utility Services. While most of the subject area experts work in silos their integration & interaction is, however, the need of the hour to achieve the objective of resilient operation of a building. This is a forum of various professionals who have associated together to share ideas, discuss issues and each of the specialists to provide seamless solutions. This forum brings in a great opportunity for growth and intellectual enrichment. We hope it makes for an interesting read and we eagerly await your feedback on the same!

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President's Message

Dear Focusians,
Wishing all members, a Bright Safe Healthy and Happy 2021.

I am indeed glad that FOCUS has been established three months back, with spontaneous support from over 2800 professional in the built environment. We are indeed grateful to Dr.Niranjan Hiranandani, National President , NAREDCO and President, Assocham for blessing us with his gracious participation. We are equally grateful to 18 of the Fraternal professional bodies to have joined FOCUS to work together on the careas of Critical Utility Services.



FOCUS has set forth an action-packed Agenda with a versatile Development Council to deal with 21 development sectors headed by the best talents in the country. Our young professional body is emerging to play the role of a unifying platform of Critical Services. The opening of Bengaluru Chapter under Ms. Jeyalakshmi Venkatanarayanan is a good augury. I am equally glad Chennai, Ahmedabad and Mumbai will soon follow. This will set the development phase of FOCUS on an active phase. The fact that FOCUS is the only professional global body dealing with all critical utility services, above and below ground, pose a larger responsibility to charter the actions benefitting the large clientele of stakeholders.

I am therefore glad that FOCUS is bringing out the first Newsletter to keep all stakeholders fully apprised of all developments in different parts of the world. It is equal gratifying to learn about interest from USA, UK, Singapore, Australia and Dubai on FOCUS work. FOCUS will go global very soon.

The ensuing International Conference on integrated aspects of design and execution will position FOCUS at center stage.

The enlarging membership of FOCUS will also find the newsletter sharing all new developments.

I wish the Newsletter all success. Let it be participative and contributive and invite all members to share their experiences and insights.

I wish the Newsletter all success.

Regards

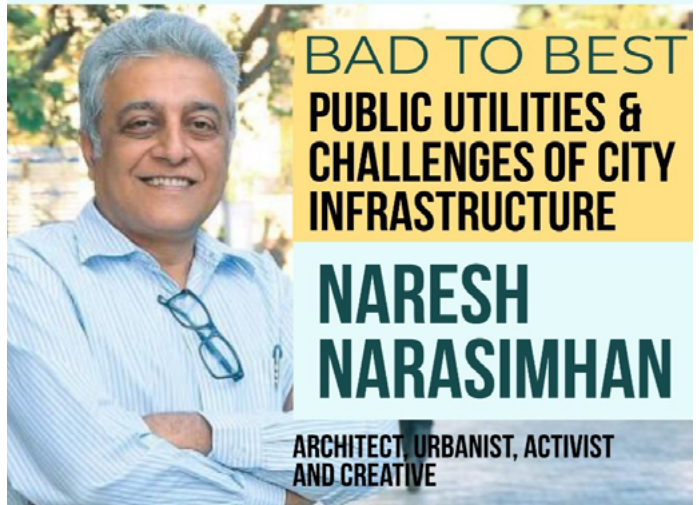
V Suresh

President, FOCUS

Bangalore Chapter Launch

Focus launched its first chapter in Bangalore in less than 45 days after its official launch. This event was hosted by Mr. Ravi Shankar Thandavan, one of our Founder Member. We witnessed gracious participation by our Chief Guest Gaurav Gupta ji Principal Secretary Industry and Commerce and Administrator BBMP, our Guest of Honour Ar. Naresh Narasimhan, Our President Mr. V Suresh, Management Committee, Founder Members, Governing Council, and various dignitaries from industry. We started the event with National Anthem followed by Lighting of the Lamp and FOCUS intro video. We then had our President address who welcomed our guests and the team. He mentioned the

various verticals coming under one roof for better development of a safe, secure, and sustainable built environment. FOCUS is a platform that includes from building's initial stage of planning, designing, construction, execution & maintenance. Our elected Bangalore Chapter's Chairperson Ms. Jeyalakshmi introduced her team and explained the FOCUS vision, mission and briefed about Bangalore Chapter's upcoming plans. It was indeed a proud moment to have Gaurav Gupta Ji as our Chief Guest. The Government is developing to help its citizens by streamlining the process and making it a simple, one-click process and by reducing the redundant processes. His clarion call for all ser-



Guest of Honour
Ar. Naresh Narasimhan



Chief Guest
Gaurav Gupta IAS

vice providers to come on a common platform for coordinated integrated action. Our respected Guest of honour, Ar. Naresh Narasimhan spoke about Infrastructure challenges in Bangalore City and opened out from Buildings to Build Environment and all critical utility services. He revealed his vision and plan on Project K-100 first time in FOCUS platform. Our General Secretary Mr. A L Narasimhan welcomed everyone and mentioned the support of 17 Fraternal Bodies who have joined FOCUS in marching together towards achieving success in the construction industry. The next chapter's in line are Mumbai, Chennai, Pune & Ahmedabad. He ensured his support for the Chapter and congratulated everyone for the successful launch of the Bangalore Chapter Event. The event was closed by a vote of thanks by our Vice Chairman of Bangalore Chapter Mr. B K Prasad.

Chairperson's Message - Bangalore Chapter

Warm Greetings!

It is my pleasure and privilege to address you as the Chairperson of our FOCUS Bangalore Chapter. Our FOCUS forum has the mission to serve as a single largest common platform for the mutual benefit of the built environment sector. Our focus is on the critical utility services that include safety, security, fire protection, electrical, HVAC, plumbing, energy conservation, building transportation, building automation, asset and facilities management and much more. As members of FOCUS, our goal is to closely work with built environment owners and service providers to improve the overall ambience and quality of life for the clients and occupants. While we are all set to achieve these goals, it is our vision to set benchmarks by addressing the areas of productivity, safety, security, quality through promoting adoption of standards and upskilling human resources across various services.

Our Chapter was inaugurated on 14th Dec 2020 by distinguished chief guest Mr. Gaurav Gupta IAS and in the august presence of FOCUS national executive team. Since then, our Chapter has drawn champions from various group of industries covering all the critical utility services areas mentioned above. They are experts in their own field and are veterans by their great experiences in their professional career. I am confident that with this strong team in place, we are all set to address our goals in the months to come. We also aim to grow our members' business by teaming and introducing them to new projects and various industries.

In today's scenario, we find lot of issues in built environments due to lack of importance to crit-

ical utility services. Due to non-compliance of norms and safety standards in critical areas such as structural, electrical, environmental and other engineering issues we see lot of damages, accidents,



fire and consequent loss of human lives and assets. A case in point is the recent fire accident in a Mumbai hospital that led to loss of precious lives of many infants. Thus, we see great challenges ahead for us in terms of Safety, Sustainability and Security. We, as members of FOCUS in Design, Execution and Maintenance fields, must act with responsibility and strive for all our partners in the built environment to understand and practice professional ethics, engineering principles and standards, with highest importance for quality throughout.

On behalf of our Bangalore Chapter, I invite all those from industry, businesses and manufacturing sectors, who are into critical utility services to come forward, become members and join hands to make our partners, customers and industries comply with all safety norms and make industry more productive.

Through FOCUS, let us make sure our city and country are safe and secure.

Regards

Jeyalakshmi
Chairperson
Bangalore Chapter

Mumbai Chapter Curtain Raiser



The event was hosted by our Regional Chair of South Mr. Dominic K P on a virtual platform. Firstly, we had participants from various industries, our founder members, development council members. A self-introduction was done by each member followed by Mr. Sandeep Shikre, our Regional Chair of the Western region spoke about the strength generated with the collaboration of various disciplines. He reinforced the importance of coming together and contribute to knowledge series, webinar sessions, site visits, newsletter publication, have access to policies. He empathized on the importance to understand the safety and longevity of the society and mentioned that the Mumbai Chapter official launch is planned to release soon in the month of March 2021.

Mr. Ashish Rakheja, Vice President addressed the members and spoke about FOCUS, presented our vision, mission, types of membership, introduced our Management Team, Development Council. Mr. A L Narasimhan General Secretary ended the curtain-raiser by giving his vote of thanks to everyone and wished good luck with the chapter launch.

“Learn from disaster and prepare for a safer future” National Safety Week Campaign 2021

I am extremely happy to write in this newsletter, released by FOCUS to mark the beginning National Safety Week campaign of 2021. The National safety week (NSW) campaign is spearheaded by the National Safety Council of India, from 4th to 10th March, every year throughout the country to reiterate the importance of safety and create awareness. Traditionally, safety was wrongly perceived as a subject that matters only to factories, construction sites or mines, etc. Friends, today Safety has become a particularly important aspect in all spheres of our lives, no matter where you are and what you do. The accidents can happen on the road while you walk or drive, while you are at the airport or railway station or a bus station, while you are watching a movie in the cinema hall or shopping in the mall. There is enough number of cases

of accidents in these places. The number of road accidents, fires, explosions is not unknown. All of you are aware of the major disasters that happened in our country recently, that include the Vizag gas leakage incident, boiler explosions, major fires in hospitals, and a recent glacier collapse in Uttarakhand where several innocent lives have been lost. The emergency response teams have done commendable work by efficiently handling the incidents, but these incidents have made us rethink again about our safety awareness levels, the preventive measures, and our preparedness to handle the emergencies.

Since last year, the life safety of the entire world has been affected due to the deadly coronavirus pandemic. The virus has impacted, our activities, our economy, and the way we conduct our business and live life. Salute to the doctors, nurses, police forces, firefighters, Safety and Security professional, and all other corona warriors for their untiring efforts in controlling the Covid-19 pandemic. While we are gradually coming out of the pandemic situation, we need to be extra cautious about safety, in the New Normal.

Safety is not a responsibility of a bunch of identi-



Lalit Gabhane
Director General
National Safety Council

fied people or teams alone. Everyone is responsible for safety. We all need to be the ambassadors of safety and play important roles in nurturing a culture of safety. Architects, consultants, and engineers must ensure that the building they design, and construct supports the safety of human life. Educational institutions need to see that they impart safety knowledge as part of the curriculum. Industries and business organizations must have safety as one of their values and must have structured safety programs in place. If each one of us commits to observing the safety rules and spread the message to our youngsters about safe/unsafe behaviours, it will go a long way in developing a positive culture of safety and positioning India as one of the safest places to work globally.

A weeklong NSW campaign is observed every year in India since 1971, across industries, institutions, govt departments, and other organizations to reinforce the safety movement. NSW provides an opportunity to re-energize and motivates us for creating a safe place to work and live. The safety programs must continue 24/7 basis throughout the year and every individual shall own responsibility for his own actions and demonstrate safe

behaviours, in the interest of his own safety and safety of his / her family, co-workers, and others. Every year NSC provides a suitable theme for a structured observance of NSW. The theme for NSW 2021 is "Learn from disaster and prepare for a safer future". During the NSW, industries conduct various safety competitions, special safety inspection & audits and focussed safety training programs, etc. National Safety Council develops and provides a variety of safety promotional materials such as posters, banners, badges, and other items to the members and others.

The National Safety Council of India was established on 4th March 1966, by the Ministry of labour and Employment, Govt of India, to promote

a culture of safety across India. The Ministry of Labour and Employment, Govt of India, has been providing unstinted support to NSC. The National Safety Week Campaign spearheaded by the council to mark its Foundation Day (4th March) has significantly contributed to spreading safety awareness in all sectors. Through the campaign, National Safety Council appeals to the citizens to participate in the safety movement and contribute to make India a safer place to work and live. I appeal all FOCUS members, architects, engineers, and consultants, that should create work environments that support a safe and healthy life, besides the business.

“Sustainability” The pathway to a resilient future ...



Ms. Mala Singh
Chairperson
Sustainability, FOCUS
(Forum of Critical Utility
Services)

“Sustainability” is much more than a recent buzzword. While the use of the word has certainly increased in frequency, the concept itself is hardly new, when we hear the word “sustainability” we tend to think of renewable fuel sources, reducing carbon emissions, protecting environments and a way of keeping the delicate ecosystems of our planet in balance. In short, sustainability looks to protect our natural environment, human and ecological health, while driving innovation and not compromising our way of life. As per Brundtland Commission 1987, Sustainability Meeting our present needs without compromising the ability of future generations to meet their own needs. It has three components – environmental conservation, social responsibility, and economic development. While most people primarily associate sustainability with environmental conservation, it is about people and the health of our communities. An ecosystem, a lifestyle, or a community that is sustainable is one which supports itself and its surroundings—that “interfaces with both existing natural systems and natural culture.”

Sustainability itself can be defined by three core

elements, each of which must be carefully considered in relation to the others: Environmental Protection, Social Development & Economic Development. Sustainability is important for us due to a very simple & straightforward reason: we cannot maintain our quality of life as human beings, the diversity of life on Earth, or Earth’s ecosystems unless we embrace it. There are indications from all quarters and from the smallest to the largest scale that sustainability is something we must address. We will run out of fossil fuels. Thousands if not millions of animal species will become extinct. We will face scarcity of natural & other resources required to sustain human life on our planet. We will damage the atmosphere & surrounding environment beyond repair... If we don’t change.

Since the beginning, as humans, we have shaped and been shaped by our surrounding nature. If we think carefully, we will find that we consume more from nature more than we serve it. It is high time to start working with nature and protect it from any kind of damage. Sustainable practices can make huge changes in our lifestyle and can

help us in many ways to work with the nature. It is really important to improve the sustainable awareness to maintain a sustainable world.

Importance of Sustainability in Development

The issue of sustainability is important for development because of the passage of time the generation changes and with this change society wants more and more benefits from the resources which are present in our nature. Because of the increasing needs of people of our society things are decaying day by day and excessive use is making things worse.

Sustainability in Business & workplace

Sustainability is becoming more important for businesses across many different industries, and a growing number of organizations are now integrating sustainability into their business strategy. A sustainable business is one that generates profit while improving societal and environmental conditions, and generating strategies for company longevity. This includes what you do (your companies' product or service) as well as how you do it (the way your business operates). The top five key areas addressed most by businesses are: Energy, Waste, Workplace, Transport and Purchasing. However, Health & wellbeing also need to be addressed equally to enhance habitability for occupants & better indoor environments. Sustainability has the power to unite staff to create a better work culture and work-life balance, and has a great impact on customers and the world. A healthy and sustainable workplace correlates to happier employees and as a result increases employee productivity, and reduces work-related illnesses. Developing an eco-sensible workplace begins on the ground level as people need to believe in these values and practice eco-friendly habits in the office for the objective of sustainability. Sustainability is not only good for the environment, but it also helps to reduce overheads of a business, improves the health of employees,

and attract customers who are looking to do business with eco-friendly conscious brands.

Sustainability in Construction-

The Environmental Protection Agency (EPA) defines sustainable construction as "the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle from siting to design, construction, operation, maintenance, renovation, and deconstruction." In simpler terms, sustainable construction is a way of building structures and establishments using non-toxic materials and ecological resources that protects the natural environment and minimize the environmental impact caused by the process. The need for a more sustainable ecosystem is greatly required, now more than ever. The built environment around us has already caused so much damage to our ecosystem that according to United Nations Environment Program (UNEP), "the increased construction activities and urbanization will increase waste which will eventually destroy natural resources and wildlife habitats over 70% of land surface from now up to 2032." This is deeply concerning for us and our future generations and therefore the need for sustainability, especially in construction is growing. Over the years, the construction sector has contributed a lot towards the destruction of our ecosystem. As per some relevant global studies, more than 40 % of global energy is being consumed in construction sector itself & a large number of natural & other resources as well. The top priority for construction industry stakeholders & key decision makers is to minimize the consumption of natural resources for construction as well as reducing the impact of construction on our ecosystem.

To meet these objectives, specific steps are needed to be taken towards designing, renovating or constructing buildings in sustainable manner by



using passive design strategies, use of renewable energy, developing efficient and smart technologies, use of green building approach, Minimization of natural resource consumption by use of local and salvaged materials, using environment-friendly or green certified materials & products for structures, Investing in research and education of sustainable structures etc.

Even though the cost of sustainable construction is higher in the initial stages of the project especially in commercial buildings, the adoption of sustainable construction has increased tremendously over the past few years considering its long-term positive outcomes. Due to the availability of new and improved technologies in the market, the cost for sustainable construction has come down.

Sustainable construction Methods-

Construction techniques, resources and building practices have evolved over the years, and with the increased interest in sustainability and energy conservation, new methods of construction that focus on sustainability have been developed. There are two things that go into sustainable construction: the materials that are used and the methods that are utilized. One of the best ways to practice sustainability in construction is through the materials that are used. These materials have the added benefit of protecting the environment

by reducing the carbon footprint of the buildings that use these materials. They promote a cleaner Earth and a future of sustainability while also being aesthetically appealing and much more efficient.

Sustainable construction isn't just about using the newest materials; it's also about using building methods that enhance renewable and sustainable efforts. Some of these methods include:

- Reduce consumption of materials precisely in order to reduce waste.
- Controlling waste management, such as separating and recycling waste.
- Constructing green buildings.
- Adaptive reuse & Retrofitting using sustainable methods.
- Managing construction sites to improve the environment & biodiversity.
- Conservation strategies for water, energy and other resources.
- Use of renewable energy.
- Use of green products & sustainable materials.

Sustainability -A key driver to boost Green economy-

Sustainable construction can also provide many jobs and boost the economy. As climate change devastates the world, efforts to combat its effects have increased, resulting in an increased demand



for construction workers and a hike in construction jobs.

According to a survey in US, the green building industry contributed \$134.3 billion of labor income to US workers, making it a major economic driver in the country. Sustainable construction also promotes sustainability and efficient energy use. With renewable energy construction on the rise, coupled with sustainable construction methods, more people are beginning to see the importance and efficiency of using sustainable methods. It also sends a clear message to the industry and everywhere else. i.e sustainability is viable and important. Sustainable construction is developing each and every day, with more

demand for cleaner and greener spaces. As the effects of climate change increase, sustainability becomes even more important. While there are challenges, the benefits involved with sustainable construction can create a pathway to a cleaner future.

Large construction companies aren't the only ones that can change their methods for the betterment of the environment. Regular and small-scale building or infrastructure companies working on their own private projects can also focus on utilizing sustainable construction methods to contribute at grass root level for the betterment of communities and environment, in return addressing the goodwill of the company to be known as a responsible organization. Whether it's using the right equipment, implementing value engineering to determine sustainable material alternatives or simply doing your best to be energy efficient, anyone can help progress sustainability efforts.

The future of Sustainable construction in India must provide focus on priority to get all short & long-term benefits of sustainability. Thus, a cleaner and resilient future can be evolved and embraced.

“Security”

The Future Roadmap of Security Solutions for Critical Infrastructure Sector in India

India’s unprecedented growth has brought with it new challenges and opportunities. Securing the critical infrastructure has become a priority and has presented a unique challenge to all the stakeholders. The resilience and preparedness to secure critical infrastructure will, in many ways, be connected with the nation’s resolve to grow and expand the economy and meet the aspirations of its future generations. The latest security technology innovations are helping to plan and secure the future roadmap for critical infrastructure in India. However, ultimately companies that wish to consistently succeed in this space will need to focus on domestic innovation and localisation. To enable this, security industry need to ramp up the research and development initiatives.

According to Inkwood Research Report, The India critical infrastructure protection market is predicted to grow with a CAGR of 10.21% during the forecast period 2021 to 2025. Factors such as the rising government investments across the power and energy sector, the increasing rates of cyberattacks, and the launch of multiple critical infrastructure projects, are expected to facilitate the country’s market growth. The multi-dimensional threats to India’s vast critical infrastructure continues to be a perennial challenge for the government and security managers.

Evolving Threats

Evolving threats to critical infrastructure are mainly pandemic, extreme weather, accidents or technical failures, acts of terrorism, and cyber threats. There are broadly three categories of threats to critical infrastructures:

- Natural** - earthquakes, tsunamis, land shifting, volcanic eruptions, extreme weather (hurricanes, floods, drought), fires.
- Human-Caused** - terrorism, rioting, product tampering, explosions and bombing, theft, financial crimes, economic espionage.
- Accidental or Technical** - infrastructure and hazardous material failures and accidents, pow-



Mr. Ashish P. Dhakan
Chairman - Security
Committee, FOCUS
(MD & CEO, Prama Hikvision
India Pvt. Ltd.)

er-grid failures, water-treatment facilities failures, water-mains ruptures, safety-systems failures and a host of other disruptions caused due to omission or commission.

Risk Mitigation Strategy

Critical Infrastructure Security strategy needs to be planned with careful study of local risk factors and evolving threat landscape. There are essential steps to identifying and protecting critical infrastructure, which may include; conducting risk assessments and prioritizing assets, conducting regular security audits, understanding the interdependencies of key infrastructure, analysing cross-sector cascading effects, and coordinating with private and public sectors to improve protection and resiliency.

Latest Technolgies

The situational awareness has become a leading consideration in the protection of critical infrastructure. The Critical Infrastructure Security can be strengthened by the latest technologies in Video Security, Access Control, Intrusion Alarm

and Perimeter Security. It can be further enhanced by Artificial Intelligence, Internet of things (IoT), Big Data and Blockchain technologies and applications. The Critical Infrastructure Security managers can apply the Face Recognition Solutions, Advanced Video Analytics, Drone Cameras and Body Worn Cameras, in special application zones as per the risk mitigation plan.

The Critical Infrastructure establishments need the latest video security hardware such as advanced IP Video Security Cameras and NVRs based on Artificial Intelligence and Deep Learning technologies. They require video management applications with command and control centre and quick response mechanism. The solution, needs to be integrated with Entrance Automation, Access Control, Perimeter and Plant Surveillance, Vehicle Movement and Identity Management for a secured critical infrastructure.

There is a need to focus on research and development to ramp up local manufacturing and customised solutions for Critical Infrastructure. This is important to strengthen the mission of Atmanirbhar Bharat.

Cybersecurity Resilience

Critical Infrastructure sector companies and institutions need to be resilient about the core cybersecurity, compliance, policy framework and risk mitigation plan. The government also constituted the National Critical Information Infrastructure Protection Centre (NCIIPC) for protecting and regulating India's Critical Information Infrastructures (CII). Cybersecurity resilience and best practices need to be followed by the Critical Infrastructure Sector.

Policy Framework

In the Indian scenario, critical infrastructure security strategy and policy framework should be planned with local risk factors and evolving threats. While doing so security systems with latest technologies should be deployed to mitigate the risks. The government's policy framework should make it mandatory to discontinue the old and redundant legacy systems to pave the way for latest security products with advanced technologies. The critical infrastructure security can be strengthened by a clause to upgrade the older systems with the new ones.

Our Corporate Members

