Khaleej Times

## IL DEFENCE

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# Safeguarding THE AUTHORITIES HAVE STEPPED UP THE SAFETY QUOTIENT WITH MODERN TECHNOLOGY



Civil defence personnel show the noblest values of sacrifice to serve the country and protect society, said His Highness Shaikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai, as he addressed firefighters on World Civil Defence Day. — Wam

# Forty years of dedication to civil safety

**Dubai Civil** Defence is constantly evolving to save lives

Farhana Chowdhury

he UAE, which is ranked high globally as one of the safest countries in the world, continues to live up to its standards. This is further supported by the Dubai Civil Defence that operates round the clock to ensure residents are protected at all times.

Since its establishment in 1976, the authorities at the Dubai Civil Defence have been responsible for public and private properties, rescue operations, transport safety, safety in public facilities, and timely response to emergency and public disasters.

To date, its fire brigade integrates world-class standards and facilities that ensure alertness and immediate action whenever required. It collaborates with regional and international firms to maintain the best equipment and practices for the safety of the emirate.

Despite stringent requirements set by the authorities, there are still cases of fires caused by neglect or poor building cladding. Officials at the Dubai Civil Defence are constantly revising the UAE Fire and Life Safety Code of Practice that acts as a useful guide for public and private organisations when setting up their base. From ventilation and smoke control systems to sprinkler setups and fire safety protection plan, the Code of Practice covers each section in detail to ensure each structure is well prepared to handle various cases of emergencies. Quick action and evacuation procedures can help save lives and prevent damage to property while waiting for the right authorities to arrive.

With the recent string of fires, the biggest being the recent Address Hotel in Downtown Dubai, which was gallantly tackled and extinguished by the emirate's firefighters, the Civil Defence is already updating its manual to restrict the use of flammable cladding and put

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Editor: Vaman Vassudev Kamat | Supplements Editor: Suchitra Steven Samuel Sub-Editor: Sadiq Shaban | Reporters: Farhana Chowdhury, Suneeti Ahuja-Kohli Designers: Mohammad Ejaz Khan, Sidharthan | Imaging: Venugopal Prabhu ADVERTISING Director Advertising: Haroon Qureshi | Senior Advertising Manager (Supplements): Philip Smith

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DUBAI HEAD OFFICE: P.O. Box 11243, Tel: +971 4 3383535, Fax: +971 4 3383345/46, E-mail: supplements@khaleejtimes.com ABU DHABI: P.O. Box 3082, Tel: +971 2 6337666, Fax: +971 2 6351122, E-mail: ktimesad@eim.ae Website: www.khaleejtimes.com



new policies in place for high-rise structures. This will help prevent potential fire hazards and improve site access.

#### Going smart

Dubai is well on its way to establishing itself as a smart city under the leadership of His Highness Shaikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai.

The Dubai Civil Defence has partnered with various organisations to improve its public services. For instance, fire alarms and fire fighting systems in most buildings in the city are connected to Pacific Control Systems, which remotely monitors and provides real-time management of emergency vehicle fleet.

The sophisticated 24x7 Command Control Centre platform uses state-of-the-art IoT solutions to deliver faster response times.

In cases of fire breakouts, location details with the quickest route and exit-entry points show up on the system at the DCD control room whenever an alarm is triggered, thus initiating an immediate dispatch.

#### Fire-related safety on the road

The country has an infamous record of having a large number of car accidents, often caused by over-speeding, poor driving habits, lack of concentration and rash behaviour.

The Ministry of Interior recorded and average of 6.31 deaths per 100,000 population per year in 2014. To combat this, authorities have initiated a series of campaigns aimed to educate motorists and pedestrians, which have shown positive results in the past few years. Furthermore, residents that display good behaviour and adherence to road safety are being rewarded.

A number of issues contribute towards car fires — be it poor vehicle maintenance, faulty parts, or even due to an inevitable rise in temperature during summer.

With the country en route towards better practices, it has made road safety one of its top national priorities in line with the Vision 2021 to become one of the best countries in the world. The UAE aims to greatly reduce the number of deaths by raising awareness, integrating a smart approach in its current infrastructure and improving response time to emergencies. The 2021 target is to reduce response time down to four minutes, which includes receiving the emergency request, identifying its priority, determining geographical location, sending out patrols and reaching the location.

A report recently released by the World Health Organisation noted that these road safety performance indicators would put the UAE among the top five safest countries in the world. — farhana@khaleejtimes.com



#### SAFETY SNIPPET

The Department of Civil Protection at Dubai Civil Defence conducted a Car Fire Safety Drive campaign at Gulf Traffic Week recently. The awareness event was held in association with the Vehicle Licensing Department of RTA.

Held as part of a transportation annual awareness safety plan, the campaign educated workers in different sectors of marine and road transportation about the causes and solutions in case of an emergency. Employees at training institutions were also among the target audience.

The drive featured lectures and practical training on how to use fire extinguishers, fire blankets and evacuation procedures with an introduction to causes of car fires.



## At the click of a button

The 24x7 Direct Alarm System for homes enables residents to report an emergency to Dubai Civil Defence immediately

he Dubai Civil Defence has introduced a unique platform that will help the emirate's residents report an emergency situation in their premises in the easiest possible way. The Direct Alarm System for Homes connects residents to a state-of-the-art Dubai Civil Defence 24x7 Command Control Centre, thus enabling the building occupants to alert Dubai Civil Defence in the event of a fire or any life and safety incident at their premises at the click of a button.

The unique solution is co-developed by the Dubaiheadquartered Pacific Controls, a leading provider of ICT-enabled managed services and converged engineering solutions for buildings and infrastructure projects globally.

The Direct Alarm System allows the citizens to report an emergency to Dubai Civil Defence at the click of a button. The system provides the best possible chance of an emergency being dealt with, before it has chance to take hold and cause substantial loss. The new solution adds more power to DCD's 24x7 Direct Alarm System and enhances the organisation's capabilities to monitor live and react to situations even before its personnel reach the accident site."

The primary advantage of the Direct Alarm System for Homes is the increased ability to raise an alarm immediately when needed at the shortest possible time and in the easiest way. All information about the residence including location map, shortest route to the building, building picture and exit-entry points are pre-populated in the system, which comes up on the computer screen at Dubai Civil Defence control room whenever an alarm is triggered for immediate dispatch.

The Direct Alarm System for Homes uses the latest technology to save lives and protect residents by connecting the premises to the Dubai Civil Defence

#### DID YOU KNOW?

The 24x7 Direct Alarm System for Homes is a service open to all residents. Once signed up, the option ensures an immediate response to fires or life and safety incidents. Residents simply have to choose a user ID and password, then provide their full home address and if possible, the floor plan and photographs of their homes to secure the service.

Website: https:// ls.24x7dcd.ae/default\_ index.htm



Command Control Centre, where alarms are monitored — false alarms are filtered out, while genuine alarms trigger the rapid dispatch of an emergency response vehicle.

The state-of-the-art 24x7 DCD Control Command Centre is set up by Dubai Civil Defence in the headquarters of Pacific Controls, the Middle East's first LEED certified platinum-rated Green Building.

Dilip Rahulan, Executive Chairman, Pacific Control Systems, said: "It has been a great privilege to work with the Dubai Civil Defence. Over the years, the Dubai Civil Defence has built unrivalled civil defence combat capabilities. We are happy to have been a partner in their journey and will continue to develop and provide the latest solutions that will help Dubai Civil Defence achieve its objectives."

A residential unit is connected to the Command Control Centre enabling building occupants to alert the Dubai Civil Defence in the event of a fire or any life and safety incident at their premises. The alarm once reported provides dispatchers with a detailed view of the location and readiness of all the emergency service vehicles at all times.

Using state-of-the-art machine-to-machine (M2M) technology, and a world-leading 24x7 DCD Command Control Centre on a cloud computing platform, this wireless system replaces the outdated terrestrial line-based system to ensure faster response times and higher efficiency.





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#### **Smart Life Safety Services**



Smart economy



Smart living



Smart governance



Smart environment



Smart mobility



Smart people

Smart mobility, browsers, dashboards, reports, APIs for developers

Governance intelligence, process efficiency and effectiveness, happiness index

#### **Dubai Life Safety Dashboards**



City Dashboard



Fire Station Dashboard

Integrated Life Safety

Platform



Building Dashboard



Personal Dashboard



Data Security Governance

Comprehensive Information Security



**DCD Cloud Infrastructure** 





Disaster Recovery











# Connecting people to government

Your dashboard for anything, anytime, anywhere to stay smart, safe, happy and connected.

As Dubai pushes ahead with its quest to become one of the smartest cities in the world, connecting people is the first step towards communication and information. The Dubai Civil Defence Life Safety Dashboards and Personal Dashboards are a sophisticated way to digitally track and access critical information online, allowing decision makers at Civil Defence, building owners, residents and visitors to determine their roles, responsibilities and accountability in a transparent and dynamic manner. The series of dashboards add more power to Dubai Civil Defence operations and enhances the organization's capabilities to capture data for better decision-making and organizational performance.

#### **Dubai Life Safety Dashboards**

Dubai Life Safety Dashboards provides key performance and safety data to the Dubai Civil Defence and individual building owners for better decision-making and improved life safety standards.

Personal Dashboard
Personal Dashboard application allows both residents and visitors to connect to the Dubai Civil Defence services and import their personal data and view them on an intuitive interface.

Our Vision: "Towards making UAE one of the safest and the most secure countries in the world"

www.24x7dcd.ae/dashboard



### Playing an integral role in Dubai's safety realm

**Pacific Control Systems** offers smart solutions that have improved the productivity of Dubai Civil Defence and propped up the overall life safety standards in the emirate

Farhana Chowdhury

Pacific Control Systems (PCS) is a leading global provider of Internet of Things (IoT) managed services solutions. Its products are used at smart airports and intelligent buildings; used for energy optimisation services, smart life safety projects, mobile asset management, and a range of other smart community services across the world.

In the UAE, the organisation plays an active role in the Dubai Smart Government initiatives by supporting Dubai Civil Defence (DCD) as an enabler of safety platforms, which are an integral part of the Smart City Service for Dubai's residents.

"As Dubai pushes ahead with its quest to become one of the smartest cities in the world, connecting people is the first step towards communication and information. The Dubai Life Safety Dashboards and Personal Dashboard is a sophisticated way to digitally track and access critical information online, which allows decision-makers at Civil Defence, building owners, residents and visitors to monitor the life safety status of Dubai in real-time and determine their roles, responsibilities and accountability in a transparent and dynamic manner," said Dilip Rahulan, Executive Chairman and CEO, Pacific Control Systems.

This system would help government departments, building owners and residents to monitor building health and safety status on an intuitive interface, and improve performance levels and safety standards by sharing realtime information.

"With the launch of Dubai Life Safety Dashboards, Dubai Civil Defence is taking a natural next step towards embracing current technological trends in the public sector. The series of dashboard adds more power to Dubai Civil Defence operations, enhancing the organisation's capabilities to capture data for better decision-making and organisational performance," he added.



Shaikh Maktoum bin Mohammed bin Rashid Al Maktoum, Deputy Ruler of Dubai, presents the MRM Business Award to Pacific Control Systems in 2013.

PCS' relationship with the authorities dates back to 2008, when it first embarked on a project to enhance safety and national security in the emirate. It implemented the 24x7 Direct Alarm System through a 24x7 Command Control Centre, which would ensure every private and government building within Dubai is monitored for fire, lift safety and emergency alarms using state-of-the-art

The system not only reduced the number of life safety incidents in Dubai, but also improved the response time of first responders and overall compliance.

#### Home security solutions developed for DCD

With an increasing number of emergency incidents related to fire at homes, there was a need to modernise and transform the fire and rescue services provided by Dubai Civil Defence for residents. Dubai Civil Defence enhanced the scope of the 24x7 Direct Alarm System project to cover villas in Dubai.

The 24x7 Direct Alarm System for Homes connects villas to the 24x7 Command Control Centre, enabling occupants to alert Civil Defence in the event of a fire or any life safety incident at their premises. The smart system can also be integrated with various security sensors to provide complete home monitoring solution.

"This innovative system allows the residents to report an emergency alarm to Civil Defence with just the press of a button. The alarm once reported provides dispatchers with a detailed view of the location and readiness of all the emergency service vehicles at all times," he said.



Residence details, including location map, shortest route to the building, building picture and exit-entry points are pre-populated in the system, which comes up on the computer screen at the DCD control room whenever an alarm is triggered. Using state-of-the-art IoT solutions, and a world-leading 24x7 Command Control Centre platform, this wireless system replaces the outdated terrestrial line based system to deliver faster response times and higher efficiency.

#### Long-standing relationship

"Pacific Control extends its heartiest congratulations to Dubai Civil Defence on their 40 glorious years of success. Dubai Civil Defence has always been on the top of the list for serving the community with their services. Pacific Control is proud and committed to support Dubai Civil Defence to enhance standards for the safety and wellbeing of the society as a whole.

"We are thrilled to support Dubai Civil Defence as they strengthen their ability to manage emergencies at all levels. We're working closely with the Dubai Civil Defence and continuously improving our services and deploying a system that exceeds their unique needs.

"Our solutions are both flexible and robust to meet the needs of first responders and emergency management teams. As our suite of applications continues to grow, we're excited to explore how our technology can further help Dubai Civil Defence improve their tactical and emergency response software needs," the CEO concludes.

— farhana@khaleejtimes.com

#### **ACHIEVEMENTS AND ACCOLADES**

- Pacific Control Systems (PCS) has been listed among the Top 10 Fastest Growing IoT Companies in the World in 2015 by The Silicon Review magazine for taking the IoT and the Smart City initiatives to a whole new level. It serves the community at large through unique strategies and actions in line with commitment to deliver smart sustainable cities and a digital lifestyle.
- In 2015, Pacific Control made it to CIO Story magazine as The World's 25 Most Powerful IoT Tech Providers for its excellence in providing cutting-edge solutions at the nexus of IoT, networked computing, and large-scale data management and was recognised among 50 Most Promising IoT Solution Providers 2015 by CIO Review magazine.
- In 2013, Pacific Control Systems was among the winners from a cross-section of business establishments for exceptional performance in fostering growth and innovation and a culture of corporate social responsibility and excellence in the country. The annual Mohammed bin Rashid Al Maktoum Business Award was presented by Shaikh Maktoum bin Mohammed bin Rashid Al Maktoum, Deputy Ruler of Dubai.
- The company provides intelligence for both the hardware and software. Unlike other players and solutions in the market that are isolated and narrowly focused, Pacific Control's capabilities encompass the comprehensive and transformative nature of machine-to-machine, the IoT, and Smart Systems. Empowering connection and control across digital and physical barriers, harnessing the profound potential of the IoT through end-to-end services and advanced platforms.





#### **OTHER SOLUTIONS**

- Pacific Control's Galaxy platform is a complete city management platform that can provide monitoring and management of virtually all assets within the city from a centralised command control centre.
- Pacific Control's Cloud Services (PCCS), a fully owned subsidiary of PCS, owns the largest tier III data centre in the UAE, which offers a comprehensive range of services to governments, banks, airlines, and other commercial organisations.
- PCS deployed Software Defined Cloud Infrastructure as a Service (laaS), comprising thousands of virtual machines, is the largest set-up of its kind in Middle East region.
- PCS has partnered with Microsoft to locally deploy a range of Software as a Service (SaaS) offerings.
- PCS is able to provide virtualised computing, storage, applications, security, disaster recovery and an extensive range of other services in an ICTaaS business model.

### Making interactions easier



Major General Rashid Thani Al Matrooshi and Dilip Rahulan, Executive Chairman and CEO, Pacific Control Systems, at the launch of Dubai Civil Defence's personal dashboard.

**Dubai Civil** Defence introduces personal dashboard for residents and visitors

he Dubai Civil Defence (DCD) has launched a Personal Dashboard, which allows residents and visitors to connect to the Dubai Civil Defence services, import their personal data and view it on an intuitive interface. This unique way will allow residents and visitors to visualise data and keep them informed and connected.

The Personal Dashboard, introduced by Dubai Civil Defence, empowers citizens, residents and visitors by connecting them to their needs, making their daily 'city interactions' more efficient and seamless.

Launching the new initiative, Major General Expert Rashid Thani Al Matrooshi, Director General of Dubai Civil Defence, said: "Dubai's Smart City initiatives are not merely about automation, it is about connecting people to their needs. Dubai Civil Defence cares about the safety and happiness of its citizens, residents and visitors; the Personal Dashboard will now enable realtime public engagement like never before. This is an extension to the Dubai Life Safety Dashboard, which assists Dubai Civil Defence and building owners in Dubai to monitor city/building live from a single screen.

"The government, private sector and people are working together to achieve the 'Smart Dubai' vision. One of the greatest promises of big and open data is the ability to create a dashboard that enables us to measure life safety conditions in real time; this is what we aspire to achieve. A Personal Dashboard is a step towards achieving the same by collecting and displaying data from public and private sources, and from ever-expanding social media networks. The Personal Dashboard comprises key metrics such as health, family and connectivity, which can help us understand how we are doing as individuals, communities and as a city. It not only enhances the internal communication with regards to monitoring incidents in Dubai, but also demonstrates our commitment towards residents."

Al Matrooshi further added: "The Dubai Civil Defence's Personal Dashboard is a sophisticated way to digitally track critical information online. It is similar to a car dashboard; it keeps all the important information, in front of you at your choice, things that you want to monitor and a SOS button to reach out to DCD in case of an emergency. The enterprise-class business intelligence delivered through the Personal Dashboard will also help all government departments, building owners and residents to monitor their buildings' health and safety status in real-time.

"With the personal dashboard, Dubai Civil Defence has joined Dubai Government's MyID service to enable single sign-in for users to access their dashboard. This will give the public an easy access to the Personal Dashboard wherever they are, and contribute effectively to transform Dubai into the smartest city in the world - an initiative of His Highness Shaikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE, and Ruler of Dubai,"

The Personal Dashboard adds more power to Dubai Civil Defence's operations and enhances the organisation's capabilities to capture data for better decision-making and organisational performance. The Dashboard will also enable other government departments to facilitate innovative services to building owners and occupants in Dubai.

Dubai Civil Defence has been at the forefront of implementing key technologies for the future of the smart city. The Dubai Life Safety Dashboard reflects the leadership's dedication in utilising technology to make municipal information more open, transparent and accessible. With the Dashboard, leadership is taking a natural next step towards embracing current technological trends in the public sector.



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