**About ACES**

*Advanced Communications and Electronics Systems Co.* is a leading ISO certified “GRADE A” EPC Contractor and “Class 1” System Integrator for Power, Telecom, Security and ICT Projects. We are a subsidiary of Sumitomo Corporation and a Closed Joint Stock - Saudi Company. Our profile includes Smart Campus, Smart Towns, AFC, Data Centers, Wireless Networks, Critical Communication Networks, GSM/CDMA/TETRA/LTE, In Building Solutions, Software Development, VAS, Integrated Security Solutions, Power Solutions, Pre Cast Civil Solutions, Communication Civil Works, Microwave Communication, Fiber & Copper Networks, Broadcasting, Telephony, Operations & Maintenance, Batteries, Generators, Switch Gears, Solar & Wind Power Solutions, Consultancy and many more. Classified as Class 1 contracting company, we have been successfully working for Telecom, OIL & GAS, Utility companies, Government and Education sectors for over 18 years and has been ranked 8th in Saudi Fast Growing 100 companies in 2010.

**About Sumitomo Corporation**

Sumitomo is a 400 years old 1.3 trillion USD Japanese business group. Their business verticals include Telecom, Media and Electronics, Chemicals, Steel, Mining and Heavy industries. Besides being part of 400 years old Sumitomo Group of Companies, Sumitomo Corporation is also a multinational investment company and an EPC Contractor in Kingdom of Saudi Arabia.

Sumitomo prefers ACES as a system integrator for its mega projects in the region resulting several opportunities for ACES. They not only compliment ACES with their international reputation, partners, expertise, vision and experience, but also support ACES by assuring end customer of their full support to ACES for any mega projects in the region.

**CIVIL DEPARTMENT INTRODUCTION**

The Civil Department of ACES has played a pivotal role in ACES emerging as an advanced engineering company in the region and its existence as a ‘Grade A’ Engineering Procurement & Construction (EPC) company.

Being led by industry veterans and seasoned engineers, the Civil Department of ACES continuously strives to provide innovative Products, Solutions & Services to our clients conforming to international quality standards. The department is having exceptional engineering design, project management, on site implementation and post implementation support services facilities that are spread across the kingdom of Saudi Arabia.

We have a successful track record of more than 18 years including Telecom operators, Government sector, Defense, Oil & Gas, Utility Companies and Other big customers in KSA and contribute to more than 30% of ACES total turnover.
Civil Department Value Add...

- Kingdom wide operations capabilities
- 4 Regional offices & more than 8 branch offices in KSA
- More than 1000 professional resources
- Highly qualified project managers and site engineers
- Peerless international products with innovative and economical solutions
- Huge warehousing facilities filled with large quantity of Materials in our stocks
- Projects Integration Facilities in all regions in Saudi Arabia
- In house design engineering facility
- Full Turnkey system integrator
- Capable to execute projects across MENA region
- Local experience and capable to handle legal permissions from local authorities
- References include ARAMCO, SEC, STC, Mobily, Zain, ITC, Defense, KSU and Others
Civil Department

Civil Department is fully equipped and having all facilities to implement projects across the kingdom. Utilizing more than 1000 professional resources of ACES, Civil Department in general offer Survey, Design, Delivery, Installation, Integration and O&M full turnkey services. Our services could be summarized as

**Services**

- Site Acquisition
- Site Survey
- Project Management
- RDS Products
- Turn-Key Projects including Civil, Architecture, Electrical and Mechanical
- Complete Solutions for Telecom Sites
- Towers – Supply, Design, Erection and Analysis
- Consultancy Works with International Firms
- Fiber Optics Civil Works
- Data Center – Design, Architecture, Civil and Electro-Mechanical Works
- Operations & Maintenance
- Research & Development
Tremendous Experience in Telecom Works

ACES has a total of more than 20,000 sites done in Saudi Arabia for various telecom operators, OIL & GAS companies, ministries and others including BTS implementations, Cell Enhancers, Indoor Coverage, Batteries, Rectifiers, Generators, DC Power Systems, UPS, Towers, Shelters, Animal Traps and many more. Below is summary of 1057 civil Sites done across KSA between 2005- April 2012

Civil Department Highlights

- ISO 9001-2008 certified
- Engineering Design and Consultancy
- Telecommunication Infrastructure Civil Works
- Substation Civil Works
- Utility Services
- Camouflaged Solutions
- Rapid Deployment Solutions
- Mission Critical Communications Infrastructure
- Technical Buildings complete Civil Works
- Data Center Construction Works
- Railways Communications Civil Works
- Shelters, Monopoles, Towers and Cell on Wheels
- Operations and Maintenance

![Civil Department Highlights Chart](chart-image-url)
Products and Solutions:

The company’s path breaking innovations solutions, green energy solutions, Precast Solutions and other pioneering products from their peerless partners are being used by organizations globally, in lowering their operating costs, enhancing productivity and driving value for their customers. At Civil Department, ACES offers a variety of products which can be mainly categorized as follows.

**Green Field and Rooftop - Rapid Deployment Solutions**

We offer supply and deployment of Rapid Deployment Solutions (RDS) in the region. The solution comprises of precast concrete foundation blocks saving tremendous time in foundation works. It also provides fully collapsible tower making it deployable in couple of day’s duration. The complete solution is re-deployable, giving customer a big advantage of complete relocation of its site.

As shown below, we offer from a green field solutions starting from 10mt height up to 60mt height RDS. However these solutions are fully customizable catering to customer requirements and also the tower could be a Monopole or a lattice tower.

A variety of rooftop designs are also available which can be further customized as per customer requirements.

Any tower height & load from 10 to 60 m for RDS solutions
Rapid Deployment Solutions Green Field

RDS 1200 SOLUTION

Example-RDS50F25U

- 50 M Tower
- 25 m² wind load
- TIA-EIA-222-F
- 160 km/h
- House upto 3 Carriers

Rapid Deployment solution (RDS)

- Modular Foundation
- Tower
- Perimetral Fence
- Shelter
- Generator
- Fuel Tank
We are offering customized design and deployment of multi operator camouflaged tower wherein each operator can have their shelter underground as shown in the images. Such a solution will not only result a good look but multi-operator concept will reduce overall number of towers in a particular location be it a university or a hospital or a government premises.
Camouflaged Towers

We are offering a variety of camouflaged solutions and concealment solutions to hide RF installations or to get a beautiful look to typical towers and shelters.

We design and deploy customized solution as per customer requirements. Our design themes include Islamic designs, Modern Designs, Creative Ideas and Typical Decorative designs.
Camouflage Shelter Concepts & Ideas

We are designing and manufacturing special made to order camouflaged shelter solutions. The concept of same is shown in images. A shelter may look like a wooden cottage or a brick wall. The fence could be covered with grass or even the whole shelter could be hidden in grass.

These are custom made solutions which are designed based on customer requirements and also on existing site outlook.
ACES has partnered with pioneering companies delivering custom made camouflaged solutions. Our solutions include supply of towers looking like Palm Tree and Camouflaged Shelter which may look like plants or a small house depending on customer requirements.

We have deployed several sites in the kingdom of Saudi Arabia. The design of the tower will be as per antennas and other load requirements of the customer. The Solution is available starting from 20mt height up to 50mt height of the tower.

For more details, kindly contact us using the information given in the contacts section of this brochure.
Cell on Wheels and Rapid Deployment

Precast Concrete Solutions:
Note: refer to Rapid Deployment Solution section
Data Centers

**Capable to Design & Implement**
Tier I, II, III and IV

**Civil Works**
Construction, Interior, Raised floors, Fire Fighting, etc.,

**Electro-Mechanical Works**
AC & DC Power Solutions, Generators, HVAC, etc.,

**Structured Cabling**
CAT cables and Fiber Cables connectivity to user locations

**Complete ICT Design, Supply & Implementation**
IT Infrastructure, Security Systems, H/W & SW, Consultancy, etc.,

**Operations & Maintenance**
Solar & Wind Energy related Solutions
Solar & Wind Energy related Solutions

APLICACIONES

La flexibilidad en la configuración del producto, a la medida del arquitecto o diseñador, hace de los vidrios transparentes fotovoltaicos un elemento indispensable en la arquitectura y el diseño contemporáneo, en los que la eficiencia energética es un factor clave.

- Elementos de fachadas ventilados, rejas, suelos, entornos de atmósfera.
- Elementos de elementos constructivos tradicionales de revestimiento.
- Paneles y sistemas móviles de control.
- Muebles, sistemas de marquesinas, pérgolas, cerámicas especiales, tejas, baldosas o baldosas.
- Aplicaciones específicas: techos móviles, puertas enrollables, ventanas o fachadas.

APPLICATIONS

The flexible product configurables, tailored for the architect or designer, make of the transparent photovoltaic glass an essential element for contemporary architecture and design, in which energy efficiency is a key factor.

- Elements of ventilated facades, curtain walls, pergolas or awnings.
- Elements of traditional facade materials.
- Tiles or panel photovoltaic systems.
- Curtains and solar control window systems.
- Urban furniture: Shelves, pergolas, parking, special building awnings, lampshades, balconies or facades.
- Special applications: Greenhouses, moveable roofs, slides, doors, windows or facades.
ACES is supplying a fully customized and integrated mobile solutions which are used as Contingency Units in case of any disaster. The key advantages of this solution are

• 3D Customized Design
• Adapted to any required
• 24/7 working duty.
• Regulation in Saudi Arabia and gulf region
• Capacity to cover 3 different vendors in the same time
• high standard furnishing covering FM 200, Fire alarm, MDB
• Sound proof generators
• AC units
• DC power & batteries covering 3 vendors systems in the same time
Our Customers & Partners

Our References Includes

For past 18 years we have a successful track record and honor of serving our esteemed customers including

UTILITY COMPANIES
OIL & GAS
TELECOM OPERATORS
RAILWAYS
GOVERNMENT
EDUCATION
HEALTH
DEFENSE
AVIATION
Our Customers & Partners
ADVANCED COMMUNICATIONS & ELECTRONIC SYSTEMS

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