Venturing along the ‘One Belt, One Road’ with Arup
China’s ‘One Belt, One Road’ (OBOR) initiative is an ambitious plan to revitalise the ancient Silk Road, which will bring unprecedented opportunities for countries along the routes.

**Forging connectivity**
A key focus of the initiative is to improve connectivity between China’s western regions and external trade networks across Asia, Africa and Europe. Our established office network, coupled with proven track record in delivering complex projects, makes us a trusted partner for local and international clients, helping them build the ‘links’ and realise the tremendous opportunities.

Our extensive office network covers key nodes along the OBOR and surrounding areas. We work closely and bring different perspectives to create the best solutions for our clients.

We are already active in projects along the OBOR. Our portfolios range from mega infrastructure projects such as airports, railways and seaports to smaller scale community projects such as residential buildings, arts and cultural venues and mixed-use developments. Through these projects, we have established long-term relationships with key clients and collaborators and also obtained a good understanding of the local culture and business environment.

**From the visible to the invisible**
Under the OBOR, improving connectivity is not limited to building physical links; it also aims to strengthen ties of trade and investment to drive the economic and social development of the neighbouring countries.

Apart from delivering ‘physical assets’ such as iconic buildings and infrastructure projects, Arup also combines technical excellence with strategic thinking and commercial insight to provide a wide range of policy and business advisory services including project finance, economic analysis, public-private partnerships, risk management and sustainability.

With a total design approach, we are able to not only realise skyscrapers but also make a lasting impact on the well-being of the community and its people. In addition, we partner with NGOs and international organisations to provide strategies and practical solutions for the less developed countries.

**Global perspective, local insight**
The initiative will encourage more Chinese companies to ‘go global’ with new investments and partnerships around the world. With more than 30 years in China, we have a deep understanding of our Chinese clients’ needs and aspirations, well qualified to provide support to those ambitious companies looking at opportunities along the routes.

For whatever we do, we translate global experience into practical solutions for local communities, with people at the heart of our design process. By working with our clients and partners exploring opportunities along the OBOR, Arup aims to continue its mission to shape a better world.
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Our proposal that the intercity route should be in a tunnel alleviated public concerns regarding devaluation, noise and security.

Florence TAV Station, Italy
The new 47,000m² subterranean railway station is an open box with platforms 25m below ground to serve the Italian High Speed Rail Network. Arup provided structural, MEP, façade, fire, acoustics and project management services.

Central Greece Motorway
This is one of the largest highway Concession projects in Europe and part of the Greek State’s major infrastructure development programme initiated prior to the financial crisis. Arup provided invaluable support to both investors and the Concession Company through very challenging times in Greece.

Konya Tropical Butterfly Garden, Turkey
We provided architectural design and complete engineering services for Turkey’s first butterfly museum. The design consists of three buildings which together form the shape of a butterfly: a 2,100m² indoor Butterfly Garden, a 550m² Insect Museum and a mixed-use building covering 800m².

Amsterdam Public Library, the Netherlands
We helped to create a sustainable modern library – an information centre with light and space at its heart.

Allianz Arena, Munich, Germany
We provided structural engineering for the home stadium for FC Bayern München and TVS 1860 München, with three tens accommodating up to 66,000 spectators. One of the building’s most striking features is the 2,874 rhomboidal inflated ETFE foil panels which form the 66,500m² roof and façade.

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Złote Tarasy, Warsaw, Poland
The 207,000m² mixed-use development includes cinemas, shopping mall, office blocks, car parking, and glass-roofed park. A huge 10,000m² free-form glazed roof encloses the terraced retail area. Arup’s scope of services includes structural, geotechnical, civil, building physics and transport consultancy.

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Mumbai International Airport Terminal 2, India
The terminal building is an iconic mega-structure of 440,000m² designed to handle 40 million passengers annually. Arup was responsible for leading the Operational Readiness Activation and Transition programme to deliver a successful terminal opening whilst maintaining 24/7 operation.

Moscow City Plot 9, Russia
The 335,000m² mixed-use development comprises two towers of 274m and 250m, providing office, retail and residential space. Working with international companies in the Russian market and bridging the needs and requirements of international codes into the Russian codes and context has become one of Arup’s strongest skills.
Donbass Arena, Ukraine
The 5,000-seat stadium is the new home of FC Shakhtar Donetsk, one of Ukraine’s leading football clubs. It features a striking circular roof supported by glass fronted façade. Inside the stadium, the spectator seats are arranged in an unbroken oval shape ensuring that the football field is perfectly visible from every seat.

MRT Blue Line North, Bangkok, Thailand
Arup acted as lead consultant from tender preparation through to construction, providing full design consultancy services for the Northern half of the Blue Line, Bangkok’s first subway network comprising 10km of twin running tunnels with nine stations.

Taguig North Sewage Treatment Plant, Manila, the Philippines
With a capacity of 75 million litres per day, the new sewage treatment facility is the largest of its kind in Manila. Our design places the whole treatment process underground to minimise impact on the adjacent national cemetery site and provide a public space.

Community school, Thnouh Village, Cambodia
A group of Arup engineers helped Project Little Dream (PLD), a Hong Kong-based charity group, to establish a school in one of the poorest areas in southern Cambodia. In the long-term, the school will transfer knowledge and function as a meeting point, serving as a catalyst for community development.

Lanzhou Centre, China
We carried out MEP concept design and drawing review services for the new landmark in Lanzhou which includes a 180m tall Grade-A office tower, a 140m tower for the Lanzhou Hilton Hotel and a SOHO office tower also 140m tall.

Canton Tower, Guangzhou, China
Modelled by our powerful software, the open-air façade belies the complex geometrical arrangement of the steel columns and rings.

Integrated planning for Ninh Thuan Province, Vietnam
Working as the provincial government’s urban design and planning consultant, Arup developed a strategic development plan that is long-term in vision; iterative in process to account for mitigating circumstances and new technology; and hierarchical in implementation so upfront investment is not necessary for communities to start benefiting.

Second Penang Bridge, Malaysia
Arup was the Independent Checking Engineer for the 16.9km sea crossing between peninsular Malaysia and Penang Island. By introducing seismic isolation, we enhanced the seismic performance significantly compared to the conforming design without any cost increase.

Canton Tower, Guangzhou, China
Arup provided structural design and civil engineering works for the MRT Blue Line North, Bangkok, Thailand

Donbass Arena, Ukraine

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Second Penang Bridge, Malaysia
Arup is the creative force at the heart of many of the world’s most prominent projects in the built environment and across industry.

We offer a broad range of professional services that combine to make a real difference to our clients and the communities in which we work.

We are truly global. From 92 offices in 40 countries our 12,000 designers, engineers, planners and consultants deliver innovative projects across the world with creativity and passion.

Founded in 1946 with an enduring set of values, our unique trust ownership fosters a distinctive culture and an intellectual independence that encourages collaborative working. This is reflected in everything we do, allowing us to develop meaningful ideas, help shape agendas and deliver results that frequently surpass the expectations of our clients.

The people at Arup are driven to find a better way and to deliver better solutions for our clients.