

# CHINA CHARTS A PATH TO EUROPE

*As the Belt and Road Initiative spreads to central and eastern Europe, China's investments in research and technology are raising concerns in the West.*

BY ANTOANETA ROUSSI



**J**ust southeast of the European Parliament in Brussels, construction cranes are hard at work, hauling the last window panes into place for a gleaming new building that establishes a beachhead for China in the heart of the European Union.

After four years of planning and construction, the China–Belgium Technology Center is nearing completion in the science park of the Catholic University of Louvain in Louvain-la-Neuve. Plans call for the €200-million (US\$224-million) facility to eventually house laboratories

and offices for some 17 high-tech companies from China and Belgium, all aiming to open up markets in each other's countries. Companies slated to move into the centre range from pharmaceutical developers to those focusing on solar energy, cancer treatments and medical 3D printing.

The privately funded centre is one small part of China's Belt and Road Initiative (BRI), an ambitious economic development programme

**Chinese loans are supporting construction of a new motorway in Montenegro.**

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that aims to increase trade between China and 131 other countries. A modern incarnation of the old Silk Road, the BRI will improve connections through a network of rail, road and marine routes.

Europe has a special place in the venture because it was the final destination of the original Silk Road. But although some strands of the BRI end in Europe, China has kept the main powers in the EU — Germany and France — at arms' length, and is instead focusing its attention on the continent's poorer nations, mostly in central and eastern Europe. Italy, which is struggling economically, joined the ranks of the BRI in March by signing a memorandum of understanding with China.

Most of this activity focuses on increasing trade, but China's President Xi Jinping has made it clear that science is one of the central pillars of the BRI. Strengthening scientific cooperation with BRI countries is "a key part of building the overall project", he said last November in a letter to the Alliance of International Science Organizations in the Belt and Road Region, a BRI science cooperation network led by China.

The promise of investments in infrastructure and research appeals to many of the economically challenged nations in central and eastern Europe. These countries have battled brain drain, persistent corruption and lack of support for research and development. In this region, Chinese companies are — among other projects — building a bridge to connect two parts of Croatia, although this project stalled in 2012, in part because of funding problems. They are also financing the construction of an energy-efficient 'smart city' near the Bulgarian capital of Sofia, which would be the first such development in Europe, according to promoters.

From their side, leaders of central and eastern European nations are eagerly welcoming China's support, as they endeavour to speed up their economic development. The attention from China is flattering for many of these countries, which have long felt neglected by the EU and looked on as inferior by their Western counterparts. They see China as a respectful partner.

Robert-Jan Smits, former director-general of the European Commission's research arm, thinks that scientific cooperation with China is, by and large, a good thing, as long as there are clear and transparent 'rules of the game', notably on issues such as intellectual property.

But others see potential problems, especially as China's actions drive a wedge between European nations. Three days after Italy joined the BRI, French President Emmanuel Macron greeted Xi in Paris. He promised more cooperation, but also said that Europe expects its major partners to "respect the unity of the European Union and the values it carries in the world".

And some Europeans are nervous about Chinese companies' investments in the high-tech, communications and information sectors. Vuk Vuksanovic, a former member of the Serbian Foreign Ministry and a PhD candidate at the London School of Economics and Political Science, is concerned about plans by Chinese companies such as Huawei to install 5G mobile communications networks and closed-circuit camera systems in Europe. Huawei announced earlier this year that it had signed 18 contracts in Europe, but officials in the United States and some parts of Europe have raised alarms about such investments. Vuksanovic says that this could be dangerous because it might allow the Chinese government and local intelligence agencies to increase surveillance in Europe.

"While there is still an ongoing debate in countries like Germany or France on this issue, in places like the Balkans, no one is contemplating on potential risks of such Chinese investments," he says. Huawei has repeatedly said that it has never installed 'back doors' in its systems that would allow unauthorized access. In a public statement in January, Huawei chief executive Ren Zhengfei said that the company is committed to protecting the privacy of individuals and nations.

With worries circulating through the corridors of Brussels, European leaders voted in February to come up with new procedures for screening investments in Europe — a move widely regarded as a direct response to China's purchase of Europe's leading robotics company, KUKA in Augsburg, Germany, in 2016.

"We must defend Europe's strategic interests, and for that, we need

scrutiny over purchases by foreign companies that target Europe's strategic assets," said Jean-Claude Juncker, president of the European Commission, in a statement in February.

## SIXTEEN PLUS ONE

The tug of war for the future of Europe was on full display early last July in Bulgaria. Just days after the nation wrapped up its six-month presidency of the European Council, Bulgaria staged a very different high-level political event — one focused squarely on China. This was the summit of the 16+1 group, an organization formed in 2012 that includes 16 nations from central and eastern Europe and China (see 'Distant relations'). At the July meeting, European leaders came together with Chinese officials such as Premier Li Keqiang to discuss economic and investment opportunities for the group.

The 16+1 organization is more formally known as the Cooperation between China and Central and Eastern European Countries, or China-CEEC, and it coordinates many of China's BRI ambitions in Europe. According to an analysis published by the China-CEEC Think Tanks Network, a Chinese government source, there were 233 separate 16+1 events between 2012 and 2017, and roughly another 40 in 2018. Like a mini-EU, the 16+1 organization seeks to coordinate activities in all manner of areas, from environmental regulations to aviation links.

The organization also has a hand in scientific collaborations. Lithuania coordinates cooperation in agriculture, including research, whereas Romania is hosting a research and development centre that aims to commercialize cultivation of China's jujube plant in Europe's arid regions. There are also 16+1 traditional Chinese medicine (TCM) centres at universities in Hungary, the Czech Republic and Montenegro, working with universities in China and with the China Academy of Chinese Medical Sciences to expand such practices across Europe.

Eleven of the 16+1 countries are part of the EU. And the China-led organization has triggered concerns that it might undermine European unity as well as sidestep rules about transparency and corruption in vulnerable European democracies.

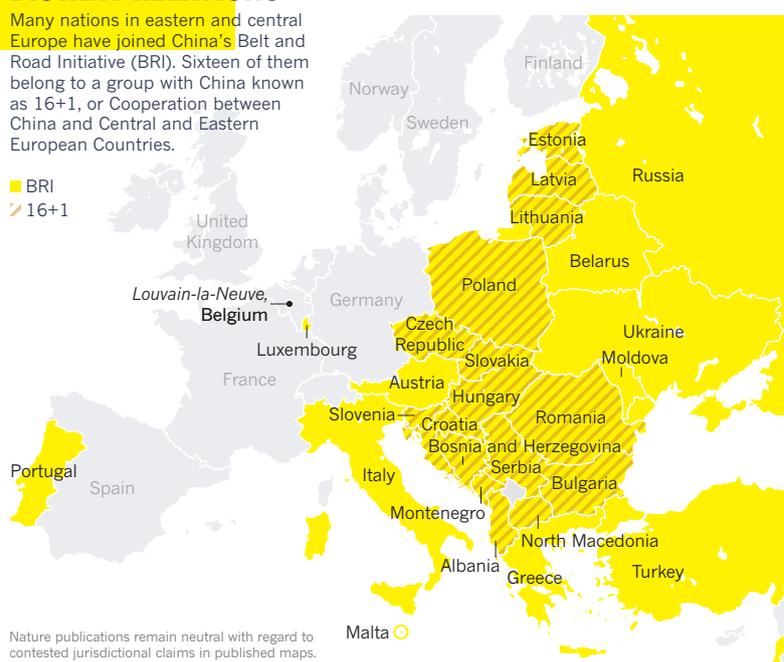
"Eastern and central European countries are increasingly looking to Beijing as a financial donor of critically needed physical and digital infrastructure," says Bart Broer, a research fellow at the EU-Asia Centre in Brussels. "As opposed to European loans, Chinese loans are not contingent on respect for human rights, the rule of law and democratic values."

The catch, according to Broer, is that Beijing is using the 16+1

## DISTANT RELATIONS

Many nations in eastern and central Europe have joined China's Belt and Road Initiative (BRI). Sixteen of them belong to a group with China known as 16+1, or Cooperation between China and Central and Eastern European Countries.

■ BRI  
 ▨ 16+1



platform not just to pursue developmental objectives. It is also leveraging its loans to acquire strategic assets and amass political influence, he says. Critics point to Greece as a prime example. Chinese banks helped to bail out Greece in the aftermath of its economic collapse a decade ago, and a Chinese state-owned company has ended up with control of the Port of Piraeus.

There are concerns that a similar sort of debt trajectory might play out in Montenegro, a western Balkan country in line for accession to the EU. In 2014, Montenegro completed an agreement with China's state-owned Export-Import Bank (Exim Bank) to finance 85% of a motorway construction project, equivalent to nearly one-quarter of the country's gross domestic product. The 165-kilometre motorway sent Montenegro's public debt soaring. According to Broer, if the motorway is not profitable, Montenegro would probably be unable to repay its debt to China and would be forced to hand over management and ownership of it to the state-owned bank.

Montenegro is also eager for Chinese expertise on setting up science parks for research and business. Last December, a Montenegrin delegation attended a 16+1 workshop in Shanghai on this kind of development.

"We received useful information and best practices in the construction and management of science parks and incubators in China," says Ivan Tomovic, an adviser at the science ministry.

Among European nations, Hungary is arguably the most active in BRI activities, describing itself as "China's number one economic partner in central Europe". It hosts what is considered the crown jewel of BRI infrastructure projects in Europe: a 350-kilometre high-speed railway that will deliver Chinese goods into Europe.

The US\$2.89-billion project, which aims to connect the capital cities of Hungary and Serbia, is the first juncture of a larger plan to connect Budapest, Belgrade, Skopje and Athens through a railway line that will end at the Port of Piraeus. The Hungarian government found itself in hot water when the European Commission launched an investigation on whether it had complied with EU procurement rules — which require public tenders for large infrastructure projects — when it named the China Railway International Corporation as the project's contractor. The project was subsequently opened for public bidding in November 2017, with two Hungarian-Chinese consortia competing, and will begin construction in 2020.

Scientific cooperation is also taking off between the two nations. In April 2017, the Chinese Academy of Social Sciences (CASS) established the China-CEE Institute in Budapest, which aims to promote cooperation and academic exchanges between China and countries in central and eastern Europe.

The institute marked "a new stage for people-to-people exchanges and academic communication", said Wang Weiguang, former president of CASS, in a statement published on the academy's website.

According to Ágnes Szunomár, head of the development-economics research group at the Hungarian Academy of Sciences' Institute of World Economics in Budapest, CASS originally approached the academy to establish a joint institute. The Hungarians considered the proposal, but decided not to be a part of it, she says, because there was too little information on how the institute would operate and what kind of research it would conduct. (The China-CEE Institute did not respond to requests from *Nature* for comment.)

Hungary's former education minister József Pálincás describes the country's scientific cooperation through the 16+1 platform in a similar way. During his time as the president of the National Research, Development and Innovation Office, Pálincás was approached by Hungarian politicians to finance a TCM research centre in the country, which was part of the guidelines set in the 16+1 cooperation. However, he says, it was not clear what the centre would do, so he denied the application.

"The Hungarian government gives a lot of lip service to the 'Belt

and Road' initiative, but I do not see any real and concrete benefit of this in research," says Pálincás. "It is more political than really a strong scientific or even industrial cooperation." In his view, the 16+1 arrangement similarly often leads to declarations of cooperation, but has yet to produce any significant research partnerships.

In fact, in 2016, Chinese companies made up just 2.4% of Hungary's foreign direct investments, whereas investments from the United Kingdom, Italy, France and Germany alone totalled 41.5%, according to data from the Organisation for Economic Co-operation and Development.

Similarly, in the western Balkans, the EU accounts for more than 70% of overall direct investment, much more than China's 11%.

## ROBOT BATTLES

One Chinese investment, however, sent huge ripples throughout Europe. In July 2016, leaders across the continent were aghast to learn of the sale of Germany's KUKA to Chinese company Midea. The EU had provided funding for KUKA's early work, and there was concern that Midea's purchase would provide China with sensitive technology that the EU had paid to develop. Manfred Weber, head of the European People's Party in the European Parliament, said in January that the acquisition signalled it was time to put in place a safeguard for European companies.

European authorities justified their vote to establish a screening tool for foreign investments by saying that it would protect "projects or programmes of Union interest" such as in the areas of research, space, transport, energy and telecommunications. The Mercator Institute for China Studies in Berlin estimates that 82% of the Chinese merger and acquisition transactions in Europe last year would fall under at least one of those categories.

"We had second thoughts on state-owned enterprises from China owning critical infrastructure in Europe," says Reinhard Bütikofer, a member of the European Parliament from Germany. When Europe invests in programmes to help spur industrial innovation, he says, "I think we owe it to the citizen that this will not be unjustly taken advantage of by third countries or investors that have not contributed".

As well as protecting strategic assets, the EU is also trying to pull together at a time when the bloc is facing major strains over issues such as limiting immigration, bailing out struggling economies and protecting the environment. Now, member states are splitting on how to deal with China.

A prime example is how the EU is handling Huawei's attempts to install 5G networks. Some European officials have said that networks built with technology manufactured in China could give the country or its companies access to vast troves of sensitive data and industrial information. Still, wireless providers in at least eight European nations have signed memoranda of understanding with Huawei.

The reason that deals with Huawei are proceeding is that there is simply no clear European alternative that could take on the task, says Broer. Some specialists worry that Europe is falling behind, as China, the United States and South Korea race to become the global leaders in next-generation communications links. That will ultimately decide who will dominate in data-heavy areas such as artificial intelligence and linking up devices in the 'Internet of things'.

And so some European leaders see China's BRI as a way to catch up. Smits, who is now president of the Eindhoven University of Technology in the Netherlands, one of Europe's top research institutions, says that the BRI would "undoubtedly give a boost" to science cooperation between China and Europe on topics such as big data, artificial intelligence, materials and computing.

"As such, a win-win between the parties involved can be guaranteed, and the Silk Road can become a truly two-way street," he says. ■

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