

RAMBOLL IN INDIA

SENIOR DIRECTOR NEEL STRØBÆK, RAMBOLL GROUP



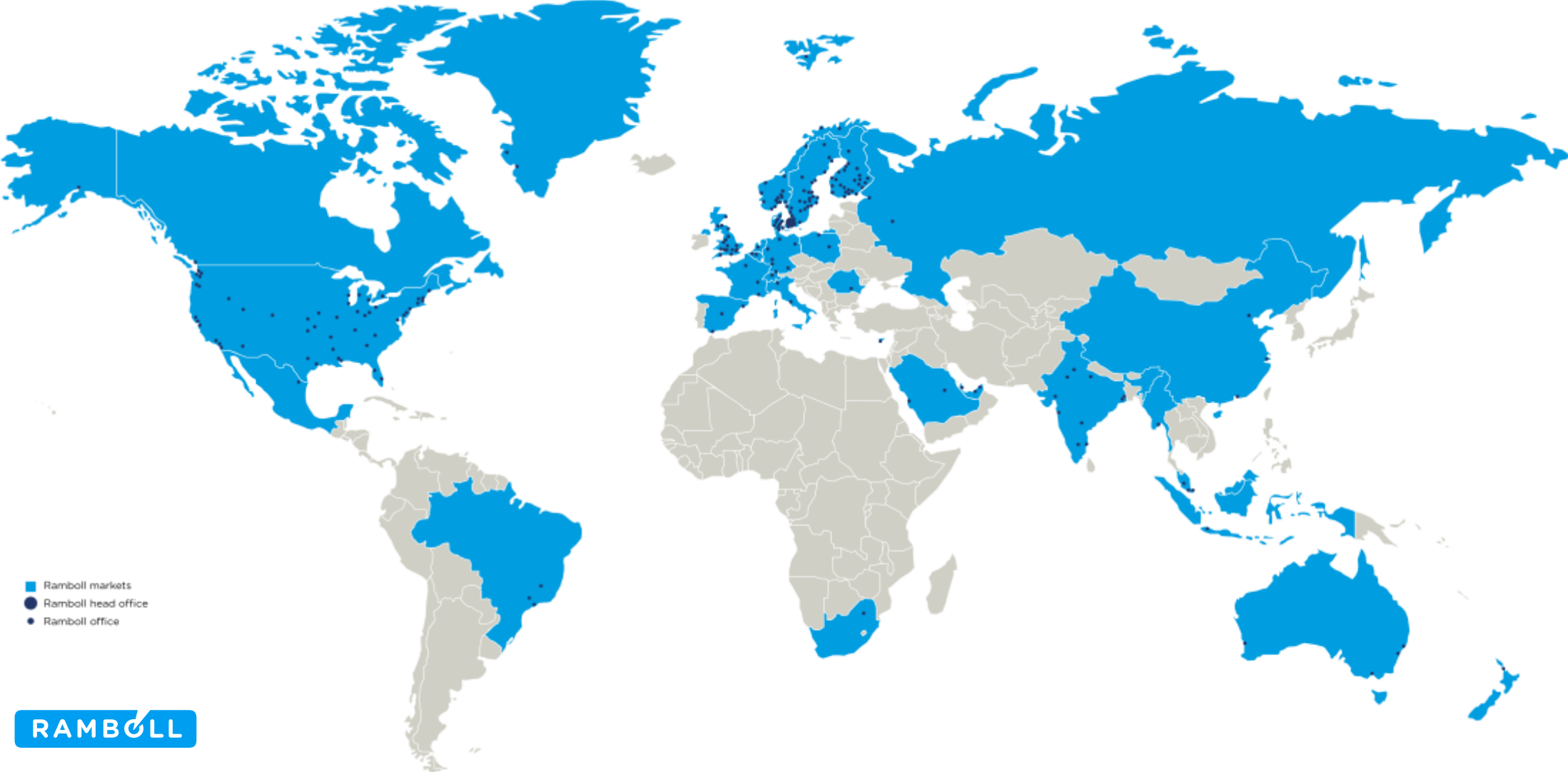
RAMBOLL IN BRIEF

- Independent engineering and design consultancy and provider of management consultancy
- Founded 1945 in Denmark
- 14,000 experts
- Close to 300 offices in 35 countries
- Particularly strong presence in the Nordics, the UK, North America, Continental Europe, Middle East and Asia Pacific
- EUR 1.4 billion revenue
- Owned by Rambøll Fonden

Services across the markets:

- Buildings
- Transport
- Planning & Urban Design
- Water
- Environment & Health
- Energy
- Management Consulting

GEOGRAPHICAL FOOTPRINT






RAMBOLL IN INDIA

- Operating in the country with offices since 1997
- Five main offices located in Gurugram (New Delhi), Hyderabad, Mumbai, Chennai, Bangalore
- More than 1,000 Indian and international experts
- Provide clients with complete, integrated and multi disciplinary solutions
- Hosts Ramboll's support organisation, engineering and digital design centres



RAMBOLL MARKETS IN INDIA

BUILDINGS	TRANSPORT	TELECOM	ENERGY	ENVIRONMENT & HEALTH
				
<p>Based in Mumbai, our clients include leading architects, developers, building owners, and private contractors</p>	<p>Based in Gurugram, our clients range from public authorities at national, regional and municipal levels, to transport operators and other private companies</p>	<p>Based in Hyderabad, we are ranked as the global No. 1 design and construction of telecommunications masts and towers (ENR Report)</p>	<p>Based in Chennai, our clients include global oil, gas and energy companies as well as governments and governmental institutions</p>	<p>Private and public sector clients across India</p>

AMAZON OFFICE, HYDERABAD, INDIA

CHALLENGE

Creating the perfect design that will cater exactly to the architect's and Amazon's requirement

WHAT WE DID

Early involvement in planning and we provided a number of options and finalised after receiving accord of all levels

EFFECT

Created an iconic building to head quarter the Indian wing of Amazon spanning across 3.5 million sq. feet

MUMBAI TRANS HARBOUR LINK MAHARASHTRA, INDIA

CHALLENGE

The 21.8km-long Mumbai Trans Harbour Link will be the longest sea bridge in India

WHAT WE DID

Ramboll is acting as an advisor for the Indian and South Korean joint venture Tata Projects-Daewoo

EFFECT

The new bridge will play a crucial role in future growth in India, providing access to new jobs and housing for thousands of people in the fast-growing Navi Mumbai



MUMBAI COASTAL ROAD, MAHARASHTRA, INDIA

CHALLENGE

The project runs from the Princess Street flyover till the south end of the Bandra-Worli Sea Link, with main line sea bridge and bored tunnels and interchanges at major junctions like Haji Ali (8 Arm); Amerson Garden interchanges, Worli Sea face and Land reclamation

WHAT WE DID

Ramboll is acting as the Lead Design Consultant for the Larsen & Toubro – Package I

EFFECT

Improved connectivity network for Mumbai for smooth traffic movement. Reduction in the traffic congestion, thus reducing the carbon foot print. Development of open spaces in form of promenade by land reclamation

GHAZIABAD ELECTRIC BUS ROUTE PLANNING STUDY, INDIA



Ghaziabad city is a part of National Capital region (Delhi NCR) with a population of 2.5 million for an area of 133 sq. km

Existing public transport facilities are proposed to be improved in Ghaziabad from the local mushroomed taxi services, shared rickshaws/autos, mini buses to high quality-low emission Electric buses and a feeder network of E-Rickshaws

Project Scope:

- Potential routes identification
- Route planning and scheduling
- Demand estimation and fleet requirement assessment
- Fare setting
- Service level benchmarking
- Identification of bus terminal locations and parking areas
- Planning for last mile connectivity with E-Rickshaws (feeder network)
- Recommendation on charging technology and station locations

TELECOM TOWERS – NOW ALSO FOR SMART CITIES

Tower Supplies



TLVA and engineering solutions



RF and EMF measurement services



iTowers



RamBase



SMART CITY SOLUTIONS

CHALLENGE

Fast-paced technological development is leading to a demand for smart technology solutions which are multifunctional

WHAT WE DID

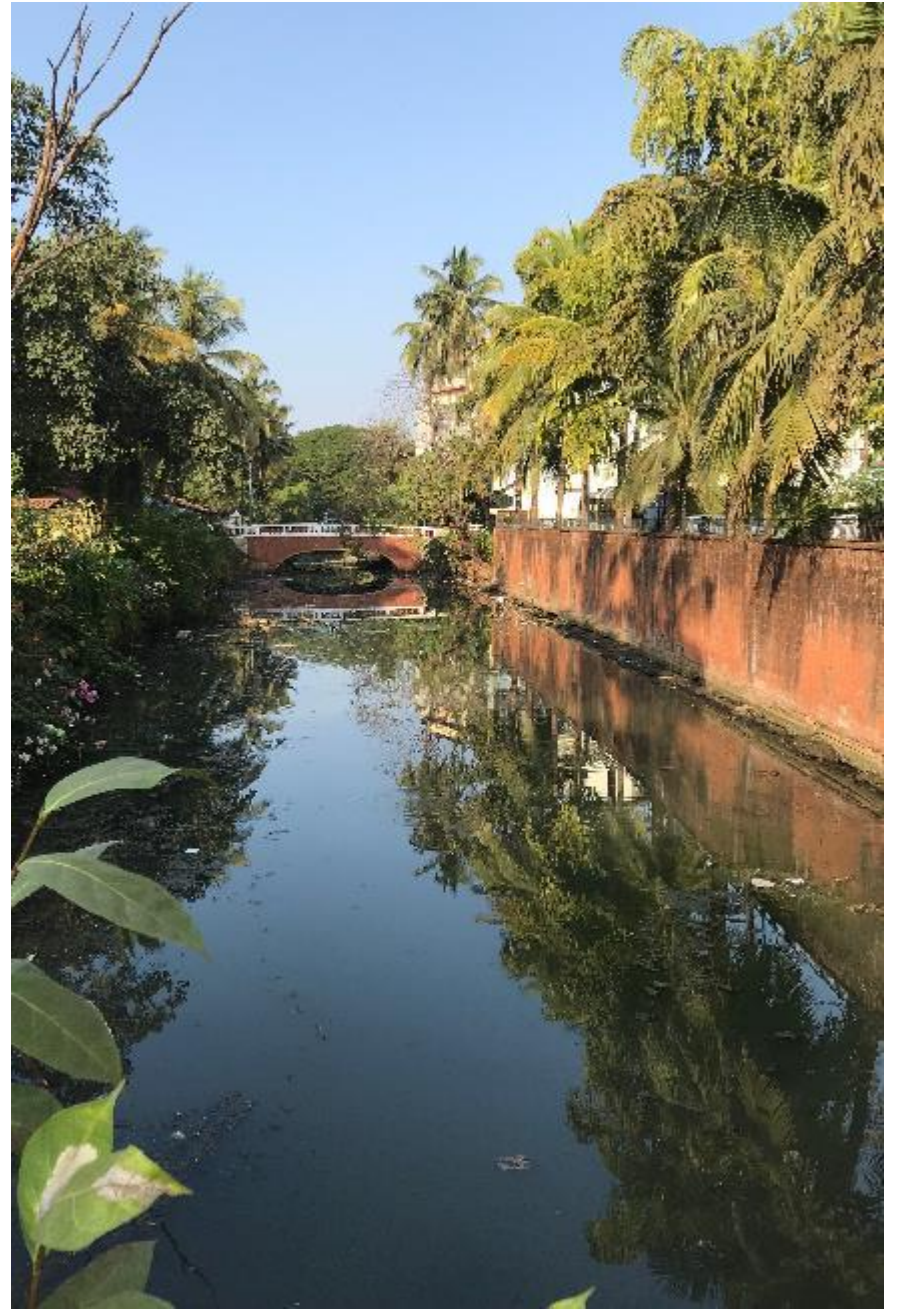
Ramboll's smart city solutions are flexible to be customised as per the client's requirement:

- Flexible LED Light arms
- Fit Wi-Fi antennae, environmental sensors and emergency announcement system
- Fit Surveillance Cameras
- Provision for electrical vehicle charging
- Host multiple cellular operators and many more
- Billboards

EFFECT

Designing Ramboll's smart city solutions has stretched our capabilities from providing telecommunications infrastructure to much more than just that

They are designed in a manner to be upgraded and modified with evolving technology and devices



GLOBAL CENTRES IN GURUGRAM

RAMBOLL ENGINEERING CENTRE

- In June 2014, Ramboll Engineering Centre (REC) was established as a dedicated institution for creating the excellence centre in Ramboll
- Based in Gurugram, the REC focusses on providing global expertise using local resources from India
- Facilitates cooperation between India, business units in Europe specifically for the Buildings, Transport and Water sectors

RAMBOLL SUPPORT CENTRE

- Established in April 2017, the Ramboll Support Organisation (RSO) is part of the new Group Strategy
- More than 800 international specialists globally with 120 employees providing support from Ramboll's Gurugram office
- RSO will deliver operational business support within HR Operations, Finance & Accounting, Business Finance (Controlling & Project Admin), IT, Facility Management & Real Estate and Procurement

DIGITAL DEVELOPMENT CENTRE

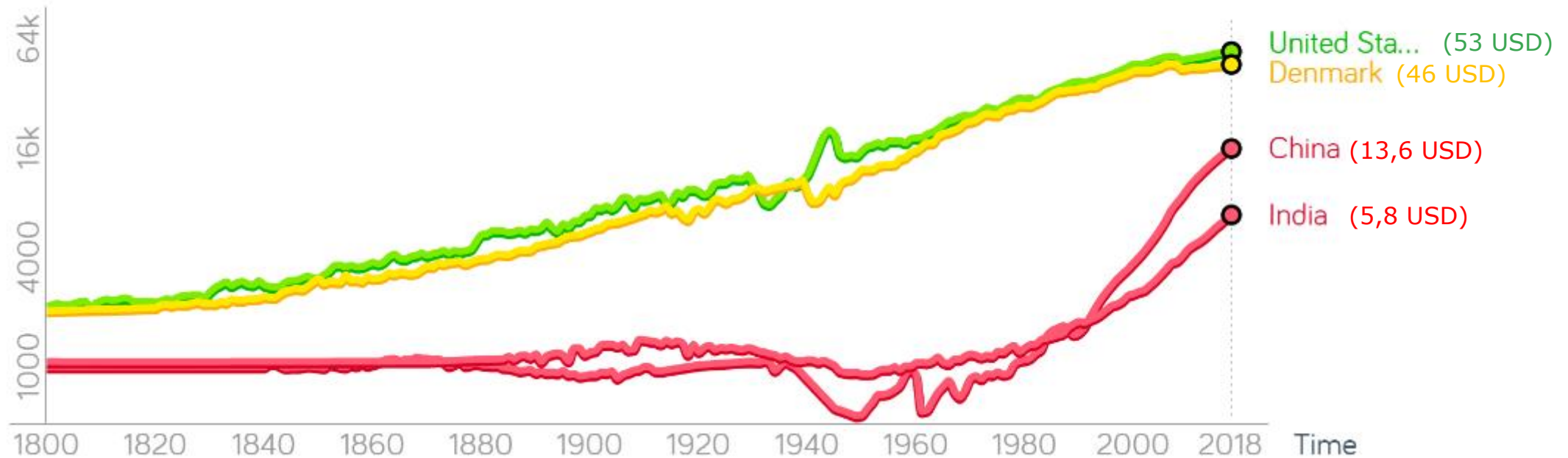
- Established in October 2018, Digital Development Centre is part of Ramboll's Group Innovation Strategy
- The centre will support and utilise state-of-the-art in global digital development and the ambition is to automate and digitalise most of our engineering processes

CONCLUDING REMARKS

INDIA – A COMPARISON

AVERAGE INCOME IS LESS THAN HALF OF A CHINESE INCOME

Income per person (GDP/capita, PPP\$ inflation-adjusted) ?



A SIZE OF THE CHALLENGE FOR INDIA

A comparison between US and India



323 mio inhabitants
(2016)

9,8 mio km²



1,324 mio inhabitants
(2019)

3,3 mio km²



+151 mio inhabitants
(2025)

278 mio inhabitants
out of poverty

**How to accommodate
429 mio inhabitants ?**

1,3 times US

THANK YOU

