ROADMAP TO
INDIA´S
SMART CITIES

INDUSTRIENS
FOND FREMMER DANSK
KONKURRENCEEVNE
The Danish Industry Foundation

ASIA HOUSE

FOREWORD

In 2017 The Danish Industry Foundation decided to support the one-year pilot project **Gateway to India's Smart Cities**, with the purpose of enabling Danish companies to access the Indian smart cities market. This was done, not only by doing business with innovative partners in India, but also by learning and listening to a country full of outstanding skills and great ideas.

The project was motivated by the ambitious **100 Smart Cities** development program, initiated by the Indian government in 2015. The program constitutes a great opportunity for Danish companies, many of whom have strong international profiles for the products and solutions in demand, to meet and co-create with Indian peers.

However, participating in the smart city program is not an easy task. Therefore, as part of the pilot project, a new **Roadmap to India's Smart Cities** has been developed by Asia House, Quercus Group and Innovation Centre Denmark.

The roadmap functions as a practical guide for Danish companies wanting to access the Indian market for urban development. This could pave the road for some high-quality solutions implemented to benefit families, companies and institutions in some of the Indian megacities. The same road could also lead to even closer links between India and Denmark and create attractive synergies where companies and authorities join forces in partnerships and ambitious alliances to develop new technologies and new solutions that benefit more citizens in both countries. And in other countries at a later stage.

This catalogue presents the new roadmap. It is based on actual lessons learned during the pilot project and can serve as a valuable tool for Danish companies willing and able to grasp the vast opportunities arising in India.

Mads Lebech
CEO,The Danish Industry Foundation

THE 100
SMART CITIES
MISSION

"The objective of the Smart Cities Mission is to promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of 'Smart' Solutions. The focus is on sustainable and inclusive development and the idea is to look at compact areas, create a replicable model which will act like a light house to other aspiring cities".

Ministry of Housing and Urban Affairs, Government of India

The Smart Cities Mission reflects a growing urgency in India to accommodate for the rapidly growing urbanization. According to a UN report, India's urban population is expected to increase from over 400 million to 800 million between 2014 and 2050, more than any other country.

The Smart Cities Mission will mainly focus on core infrastructure, ensuring adequate water and electricity supply, providing sanitation, waste management, public transport and affordable housing, improving IT-connectivity, digitization and e-governance.

The Smart Cities Mission is part of a larger agenda of creating Industrial Corridors between India's big metropolitan cities in India. These include the Delhi-Mumbai Industrial Corridor, the Chennai-Bangalore Industrial Corridor and the Bangalore-Mumbai Economic Corridor. A number of green field cities are being built or planned for these industrial corridors.

The Smart Cities Mission was launched by Indian Prime Minister Narendra Modi in June 2015, and carries a budget of nearly DKK 100 billion for FY 2016-20. Even more is expected (and needed) by private investors. According to Deloitte, the 100 Smart Cities Mission will require a total investment of over DKK 900 billion.

The Smart Cities Mission includes both area development and pan-city initiative. Area development covers urban renewal and retrofitting that benefits people living in that particular area. Pan-city initiatives aim to use IT technology to develop soft infrastructure available to all citizens across the city, e.g. citizen grievance portal or public Wi-Fi.

THE MODEL

This model provides a step-by-step guide for Danish SMEs wanting to access the Indian Smart Cities market, including key activities and decisions to be taken when looking to India. The model has a unique focus on the reality and requirements of SMEs, and is based on the experience and learnings accumulated throughout the **Gateway to India's Smart Cities-project**.

Prior to the project, Danish knowledge on Indian Smart Cities revolved mainly around the many opportunities to be had in India, not how these opportunities could be accessed from an SME perspective. The project sought to address this gap by testing different approaches to the Indian Smart Cities market, verifying assumptions and identifying key stakeholders.

The project involved 39 Danish SMEs and 5 Indian companies, and focused on real and potential business opportunities. The project was framed around three camps in Denmark and India, where Danish and Indian companies met with relevant counterparts. The model is based on what turned out to be the most probable though not exclusive approach for Danish SMEs to access the Indian Smart Cities market; becoming a sub-supplier to an Indian company.

The model covers the entire market entry process; from initial preparation in Denmark to partnering with India to proving your concept. Each of the 15 steps present a general framework for action which may be adapted to individual needs and situations. The model provides a generic approach to a specific market with a great potential.

REALITY
CHECK

✓

Limited
Danish
network
in India.

✓

Adapt
your pitch
to the
Indian
reality.

✓

A local
partnership
platform
strengthens
your value
proposition.

✓

Knowing
the basics
of Indian
society
is a must.

✓

Expect a
need for
product
customi-
zation.

✓

Accessing
the right
stakeholders
is crucial
for success.

✓

Accessing
India is a
challenging
and long
term
process.

✓

Use potential
EKF credit
schemes
as a selling
point.

✓

Expect
price
adaptation
to a low
cost market.

✓

Indian
customer
expects
documentation
for Proof of
Scale (POS).

✓

Indian
customers
expect market-
based Proof
of Concepts
(POC).

✓

Use MoU's
and NDA's
to test
your
partners
commitment.

Prashanth Pattabiraman
Head of International Business Development
Danish Energy Management

"It has been a very rewarding experience for us to be part of the "Gateway to India's Smart Cities" program... the program helped us gain quick insights on the national smart cities mission, identify market opportunities, provided an overview of select smart cities and their priorities, and helped us foster cooperation with a strong local partner together with whom we are actively pursuing relevant project opportunities in the country. It is however clear to us that taking a long-term view and recognising the need for localisation are key to being successful in the country".

BECOMING AN INDIAN **SMART CITY**

SELECTION

From the onset, the 100 smart cities were to be evenly distributed across the nation, with at least one city to be selected from each of India's 29 states, and the remaining to be distributed according to the state population. Within this framework, the cities were to compete for a Smart City nomination and the USD 100 billion government funds (half of which is financed by the central government and half by the state governments). Presently, 99 Smart Cities have been selected, with a total urban population of nearly 100 million people.

ORGANIZATION

Nominated Smart Cities are to establish a Special Purpose Vehicle (SPV) responsible for managing and implementing the projects. The SPV is headed by a full time CEO, with nominees from the Central Government, State Government and Urban Local Bodies on its Board. The SPV must ensure financing for the projects, leveraging the funds available from the central and state government to attract other investments. The SPV's need to fulfill certain criteria before funds are released, most notably the submission of the City Score Card. As of July 2018, total Smart Cities Mission investments amount to DKK 200 billion. For a comprehensive view of the Smart Cities program, see smartnet.niua.org **smartnet.niua.org**

THE
ROADMAP

PREPARING FOR INDIA

1. Formulate value proposition

2. Prepare initial pitch

PARTNERING WITH INDIA

10. Travelling to India

9. Sign NDA with Indian partners

PROVING YOUR CONCEPT

11. Sign MoU with Indian partners

12. Enter precontract with Indian partners

POC

3. Engage with Danish knowledge base

4. Identify potential Indian partners

5. Prepare initial plan for POC

8. Go-No Go decision

7. Dialogue with EKF, IFU etc.

6. Initial meetings with potential Indian partners

13. Implement POC

14. Effectuating contract

15. Bid proposal for Indian Smart City

ROADMAP
PREPARING FOR INDIA

1 FORMULATE VALUE PROPOSITION
To be relevant on the Indian market, you need to understand your product in relation to the demand and the narrative of the market. Based on this, you should develop a value proposition of your product to the Indian market. There is plenty of experience to learn from. Use it!

2 PREPARE INITIAL PITCH
India often prefers quick solutions to large problems at minimum cost. Adapt your pitch and product to this. Don't expect a plug-and play approach, modify your products to the Indian market. Simpleand robust products at low cost and high volume is often preferred.

3 ENGAGE WITH DANISH KNOWLEDGE BASE
India is complex. Reach out to Danish stakeholders with active networks and understanding of India as early as possible.

4 INDIAN PARTNERS
Don't expect to access the Smart Cities market via public tenders. Engage with Indian companies on the market and take on the role as sub-supplier. A key activity is to identify your Indian partner.

5 INITIAL PLAN FOR POC
Indian customers expect you to provide and finance a proof of concept (POC) for your product. Consider how to finance and implement your POC.

ROADMAP
PARTNERING WITH INDIA

7 **DIALOGUE WITH EKF AND IFU**
After identifying your Indian partner, start a dialogue with IFU and EKF on how they can assist in developing a financing model. The EKF credit framework is an asset to be used actively. IFU has a relevant SME fund.

8 **GO-NO GO DECISION**
Should you proceed?
Evaluate your local partners and consider your business model: Is your product relevant to India? Does it need to be modified? How is the pricing? Can you scale sufficiently?

6 **INITIAL MEETING WITH POTENTIAL INDIAN PARTNER**
It's time to set up the first meeting. Create a thorough and professional pitch material adapted to Indian reality. This will serve as a solid baseline for an initial dialogue, and probably save you a first trip to India. If the material is sufficiently elaborate, your first contact with your India partner/customer can be handled via Skype or Video Conference.

9 **SIGN NDA WITH INDIAN PARTNERS**
In India, the signing of NDAs (Non-Disclosure Agreements) and MoUs (Memorandum of Understanding) are important steps in building partnerships. Use these documents to test your localpartner's seriousness.

10 **TRAVELLING TO INDIA**
With the NDA signed, go to India and meet your Indian partner(s). Your pitch material should be updated and used as a new baseline for dialogue.

ROADMAP
PROVING YOUR CONCEPT

12 ENTER PRE-CONTRACT WITH INDIAN PARTNER

POC ☑

After the MoU, plan for the POC. Indians usually expect the POC to be funded and implemented by you, so ensuring a contractual commitment from the Indian partner based on the POC results is important.

13 IMPLEMENT POC

The POC implementation s hould be based on specific and tangible criteria for success.

11 SIGN MOU WITH INDIAN PARTNERS

The signing of an MoU with your Indian partner is important. Often, Indians and Danes have different percep-tions: Danes tend to perceive a MoU as a legal document. Indians see it as a first indication of mutual interest.

14 CONTRACT COMES INTO EFFECT

After successful implementation of the POC, the signed pre-contract should be transformed into a complete and comprehensive contract. Seek support from a lawyer with in-depth knowledge of Danish and Indian law.

15 BID PROPOSAL FOR INDIAN SMART CITY

Based on the contract, you are ready to take part in a bid under the Indian Smart Cities Program.

DANISH INSIGHTS
ON INDIA

REPORTS AND ARTICLES RELATING TO THE GATEWAY TO INDIA PROJECT:

Gateway to India's Smart Cities – Mapping International Approaches to the 100 Smart Cities Mission
Quercus Group (May 2017)

Fact Finding Mission Reports on the cities of Kakinada, Nagpur, Udaipur and Erode
Performed by Innovation Centre Denmark, India (2016), and financed by the EAC Foundation

Smart Liveable Cities in India – Opportunities for Danish Companies
Quercus Group (2015)

FOR A GENERAL UNDERSTANDING OF POLITICAL, SOCIAL AND ECONOMIC DEVELOPMENT IN INDIA

Brudstykker af det moderne Indien
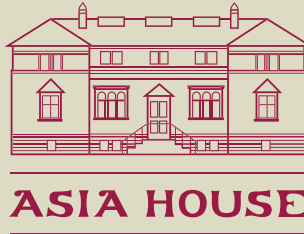Forlaget Univers (2017)
Peter Johansen

FOR AN ACADEMIC APPROACH TO INDIAN BUSINESS CULTURE

Business Operations in India
University Press of Southern Denmark (2009)
Jan Stentoft Arlbjørn

This model has been developed by

ASIA HOUSE

The model concludes the project **Gateway to India's Smart Cities**,
developed and implemented in partnership with

| QUERCUS GROUP

INNOVATION
CENTRE
DENMARK

and supported by the Danish Industry Foundation

INDUSTRIENS
FOND FREMMER DANSK
KONKURRENCEEVNE
The Danish Industry Foundation