Smart Cities

A "Smart City" is a rapidly evolving concept, with a number of overlapping definitions. A Smart City uses digital technology to accomplish the following:

- o Reduce costs
- o Increase efficiency
- o Reduce the use of natural resources
- o Cut energy consumption and reduce pollution
- o Reduce the need for local travel through increased digital connectivity

Smart Cities also aim to:

- o Create better engagement between the built environment, the natural environment and the citizens
- o Improve the delivery of social infrastructure through innovation, including better healthcare, education and social services
- o Create more efficient use of essential supplies and services, including energy, water, wastewater and solid waste management
- o Improve the quality of life and create better social and working environments
- o Optimise the use of renewable energy technologies, built into the design of the city
- o Tackle climate change issues by conserving finite resources of water and energy, and improving air quality
- o Create cities with improved ergonomic design, facilitating more efficient and population-friendly connectivity between residential, working, retail and recreational areas

The importance of Smart Cities can be seen from estimates that the sector will have a $1.5 trillion market potential by 2020.

Methodology

Patterns of urban living have changed dramatically and irreversibly over the past half century. Almost all countries have experienced large-scale urbanisation and rural-urban migration; many countries, with some notable exceptions, have ageing populations; there is a substantial increase in the online retail and entertainment industries; there is increased pressure on public finances; there is an increased need to incorporate renewable energy as a pre-planned element of the urban environment; and a requirement for joined-up transportation policy, linking intercity and intracity transport, and integrating public transport, individual vehicle usage and cycling & pedestrian zones.

Capacity building and implementation

CIID will work with national, regional and municipal authorities to develop and implement a comprehensive Smart City plan, using Frost and Sullivan's definitions of a Smart City: (i) smart governance, (ii) smart energy, (iii) smart buildings, (iv) smart mobility, (v) smart infrastructure, (vi) smart technology, (vii) smart healthcare, and (viii) smart citizens. This plan will include wide-ranging capacity building to develop the necessary implementation capability for the new technologies required for a smart city.

ICT features will be integral to all the major functions of the city; and the goal will be to create more efficient use of physical infrastructure to support strong and healthy economic, social and cultural development. Throughout the project, it will be emphasised that the development of Smart Cities is a process: there is no static end point; Smart Cities will continue to evolve to create better and more efficient environments, with a more healthy and better quality of life for its citizens.