



INFANT, TODDLER, CAREGIVER-FRIENDLY NEIGHBOURHOOD

POLICY WORKBOOK



Smart City
MISSION TRANSFORM-NATION



Ministry of Housing and Urban Affairs
Government of India



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Ministry of Housing and Urban Affairs
Government of India

The Ministry of Housing and Urban Affairs is the apex authority of Government of India to formulate policies, coordinate the activities of various Central Ministries, State Governments and other nodal authorities and monitor programmes related to issues of housing and urban affairs in the country. The Smart Cities Mission was launched by the Ministry in 2015 to promote sustainable and inclusive cities that provide core infrastructure and give decent quality of life to its citizens, a clean and sustainable environment and application of 'Smart' Solutions.

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Founded in 1949, the Bernard van Leer Foundation (BvLF) is a private foundation focused on developing and sharing knowledge about what works in early childhood development. It provides financial support and expertise to partners in government, civil society and business to help test and scale effective services for young children and families. Urban95 is the Bernard van Leer Foundation's 30 million euro initiative to make lasting change in the landscapes and opportunities that shape the crucial first five years of children's lives. BvLF has supported programs in India since 1992.

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Founded in 1961, BDP is one of the largest interdisciplinary design led firm in Europe and has won over 750 awards for design quality from international and national bodies. BDP established a studio in India in 2010, and has worked on projects at every scale, from city masterplans to detailed public realm design; from concept through to delivery. BDP brings skills involved in the design of great spaces and environments into a single, managed service. The team in Delhi provides masterplanning, urbanism, architecture and landscape design services with access to the combined expertise of all of BDP professionals worldwide.

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Contents

POLICY WORKBOOK

Introduction	7
Why is a Policy Workbook needed?	7
How to use this Workbook	7
Existing Policies and Guidelines	8
Policy Framework Review	11
Potential Policy Framework for ITCN	11
Short-Term Potentials	11
Long-Term Potentials	14
Guidelines Review	17
Institutional Framework	23
Urban Local Body (ULB)	23
Special Purpose Vehicle (SPV)	25
Budgeting & Funding	27
StAkeholders Relevant to ITC Welfare	28
Process Management	30
Examples of Implementation Works	32
Possible Policy Proposals for ITCNs	34
Policy Level Recommendations	34

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List of Figures

Figure 4.1: Pan City and Area Based Development Projects of Top 20 cities under SCM ⁴	12
Figure 4.2: Suitability of existing policy frameworks for applying ITCN Guidelines	16
Figure 4.3: Gaps that exist in Existing Guidelines	22
Figure 4.4: Administrative Structure of Indian Governance System	24
Figure 4.5: Institutional Framework suggestion at ULB Level for implementation of ITCN Guidelines	24
Figure 4.6: Institutional Framework suggestion at SPV Level for implementation of ITCN Guidelines	25
Figure 4.7: Stakeholder Actions and Opportunities	29
Figure 4.8: Policy Proposal	35

List of Tables

Table 4.1: Existing ITC Welfare Policies & Guidelines	9
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Introduction

WHY IS A POLICY WORKBOOK NEEDED?

Given the traditional practice of city planning which happens with technical and professional stakeholders, the needs of children have been often ignored. Cities have begun to realise this planning gap and are now looking at addressing these needs in a holistic manner by building child-friendly aspects into city planning. To date, India has not adopted any urban policy focused on the well being of a child, such as Unicef's Child Friendly Cities Initiative. There is nothing focused on the youngest children, what we term infants, toddlers, and caregivers or ITC. And nothing again that works specifically at the neighbourhood level for this group.

To advocate ITC friendly practices we must review the existing policies and norms in relation to child friendliness and extract gaps in them to cover the welfare of ITCs holistically. Other major areas of concern are the processes of implementation of these regulations. We need to understand the implementation processes through the public/private agencies available in the Indian governance system. There is also a prerequisite requirement to educate and guide the stakeholders about the benefits of such initiatives and their impact on the quality of lives of people.

HOW TO USE THIS WORKBOOK

This workbook will guide the urban local bodies, local stakeholders and citizens to answer the following questions:

- **Which policy framework has the potential to be used for creating an ITC friendly neighbourhood?**
- **What are the existing guidelines and do they provide enough ITC friendly norms?**
- **What institutional framework will help in applying these guidelines?**
- **Which stakeholders need to be involved in implementation process?**
- **What roadblocks may need to be faced in the implementation of these guidelines and how to address them through live examples?**
- **What kind of policy and implementation framework may be used for application of ITC guidelines?**



Church Street, Bengaluru
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EXISTING POLICIES AND GUIDELINES

The identification of children as the target group is very well understood and taken as a priority at the national level policy-making process. The critical impact areas of these policies are health and education. They form the basis for most initiatives related to children in India nowadays.¹

There are some existing laws on built environment for ITCs like the Factories Act, 1948 and [The Building and Other Construction Workers' \(Regulation of Employment and Conditions of Service\) Act, 1996](#). These acts provide some basic norms, like crèches shall provide adequate accommodation, be adequately lit and ventilated, be maintained in a clean and sanitary condition, be under the charge of women trained in the care of children and infants. Similarly, in the Amended [Maternity Benefit Act 1961](#), [Rajiv Gandhi National Creche Scheme](#) provides some provisions for built environment for ITC.

The generic built environment related policies and frameworks are stated in Table No 4.1 on the right. As we are looking at young children and a neighbourhood, we need to look at the policies formulated for them at state and local level.

Of the 128.5 million children residing in urban areas, close to 7.8 million children are between 0-6 years.

Notes:

¹ [National Plan of Action for Children 2016](#)

EXISTING ITC WELFARE POLICIES AND GUIDELINES		
Naional Level Policies - ITC Welfare		
<ul style="list-style-type: none"> • The National Policy for Children (NPC) • National Plan of Action for Children 2016 • Midday Meal • Right to Education • Kishori Shakti Yojana • Integrated Child Development Scheme (ICDS) • National Commission for Protection of Child Rights - Regulatory Guidelines for Private Play Schools • Rajiv Gandhi National Creche Scheme 		
State and Local level Policies - ITC Built Environment		
Statutory Physical Plans	<ul style="list-style-type: none"> • Masterplan (MP) • City development plan (CDP) • Zonal Development Plan • Local Area Plans (LAP) • Layout Plans of Plotted Development • Group Housing Plans • Town Planning Scheme (TPS) • Comprehensive Mobility Plan (CMP) 	
Guidelines & Codes	<ul style="list-style-type: none"> • Urban & Regional Development Planning, Formulation and Implementation (URDPFI) • National Building Code (NBC) • Indian Road Congress Guidelines (IRC) • Unified Traffic and Transportation Infrastructure (Planning & Engineering) Centre Guidelines (UTTIPEC) • Institute for Transportation & Development Policy (ITDP) Guidelines • Indian Green Building Code (IGBC) • Building Bye Laws 	
Implementation Mechanisms – Management & Finance	<ul style="list-style-type: none"> • Ward Level Plan • ULB Annual Budget 	
Special Programs	<ul style="list-style-type: none"> • Smart City Initiative (SCM) – Area Based Development or ABDs • Atal Mission for Rejuvenation and Urban Transformation (AMRUT) • Pradhan Mantri Awas Yojana – Housing for All • Swachh Bharat Mission 	From an urban development perspective, several programmes developed by the Ministry of Urban Development and the Ministry of Housing and Poverty Alleviation have highlighted some aspects that are relevant to children
Special Implementation Mechanisms – Management & Finance	SPV Annual Plan	

Table 4.1: Existing ITC Welfare Policies & Guidelines

The National Policy for Children (NPC), 2013, has been one such national level policy. It affirms the government's commitment to addressing the challenges faced by children. In line with the government's earlier commitments towards rights of children, the NPC recognises that childhood is an integral part of life with a value of its own and that children are not a homogenous group and their different needs require different responses, especially the multidimensional vulnerabilities experienced by children in different circumstances. NPC also acknowledges the need for a long-term, sustainable, multi-sectoral, integrated and inclusive approach for the overall and harmonious development and protection of children. NPC's priority areas are survival, health, nutrition, development, education, protection and participation.¹

The Ministry of Women and Child Development, responsible for executing the NPC, has also drafted the [National Plan of Action for Children 2016](#) to provide a road map linking the policy objectives to actionable strategies under the four key priority areas. The action plan aims to establish effective coordination and convergence among all stakeholders, including government ministries and departments as well as civil society organisations. Among various other child-friendly objectives, the action plan focuses

on creating child-friendly spaces at disaster rescue sites, saving them from abuse and violence, provide child-friendly toilets, drinking water and hand washing facilities, and provide child-friendly transport systems.¹

Many programmes and missions related to children, developed by the central government, are being implemented by state governments at the city level. These programmes respond to specific physiological needs of children like nutrition ([Midday Meal](#)), education ([Right to Education](#)), and health, and they focus on a particular demographic of children such as adolescent girls ([Kishori Shakti Yojana](#)), street children and young children (Integrated Child Development Scheme or ICDS).²

Notes:

² NIUA, 2016, Indicators for Child Friendly Local Development I-CHILD, page 17

Policy Framework Review

POTENTIAL POLICY FRAMEWORK FOR ITCN

Urban development process involves the preparation of policies to achieve various stipulated goals. It is clear that the current planning procedures used since many years take time to see the light of the day, in most cases. In developing quality solutions for neighbourhood planning, there needs to be a more realistic approach to see applicable, quicker results. A better option is to create a roadmap that focuses on short and long-term potentials in the existing policy framework for sustainable, smart development at a local scale. The time based approach is also critical as the statutory nature of prevalent urban planning policies at national and state level are not tailor made to suit the application of ITC Guidelines yet.

Strategic components of Area Based Development in the Smart Cities Mission are

- City improvement (retrofitting)
- City renewal (redevelopment)
- City extension (Greenfield development)

SHORT-TERM POTENTIALS

Short-term potentials should cover a period of 1-2 years for implementation of projects.

Smart City Mission Guidelines (SCM)

Area Based Developments (ABDs)

The purpose of the projects under the Smart Cities Mission is to drive economic growth and improve the quality of life of people by enabling local area development and harnessing technology especially that leads to Smart outcomes. Area Based Development will transform existing areas (retrofit and redevelop), including slums, into better planned ones. New areas (Greenfield) will be developed around cities to accommodate the expanding population in urban areas. Area Based Development in a city may contain one or more neighbourhoods which could be retrofitted or redeveloped, by adopting smart initiatives for child-friendly development.

Area Based Developments will transform existing areas.

- Smart City Mission ³

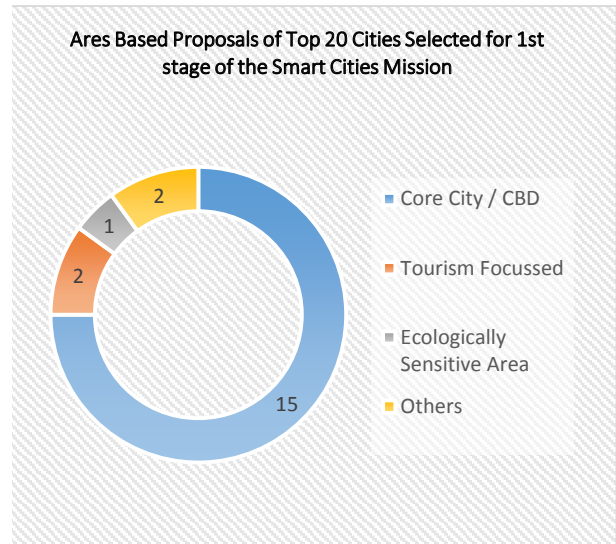
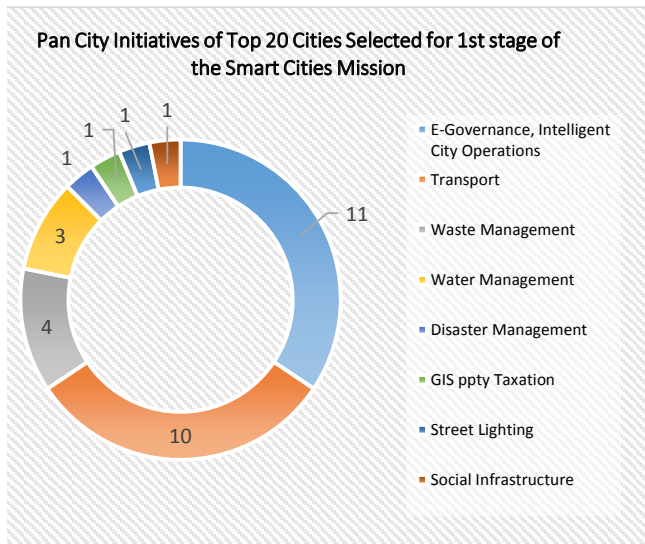


Figure 4.1: Pan City and Area Based Development Projects of Top 20 cities under SCM ⁴

Some of the components of Area Based Development include: ²

1. Holistic development of existing and new areas
2. Citizen's expectations are met by the quality of life
3. Walkable localities
4. Accessibility to park, preservation and development of open spaces
5. Last mile connectivity to public transport
6. Citizen friendly and cost effective governance

The ABD approach in the SCM gives a clear opportunity to apply these ITC guidelines to a local area. Place-making could be taken up with the objective to provide theme based facilities, which would be innovative and dynamic than those of typical obsolete solutions. Each place-making site would have design elements, furniture, and spaces designed suitable to the ITC theme of activities, and create a platform for public participation. Such projects could be replicated in other neighbourhoods in the city.

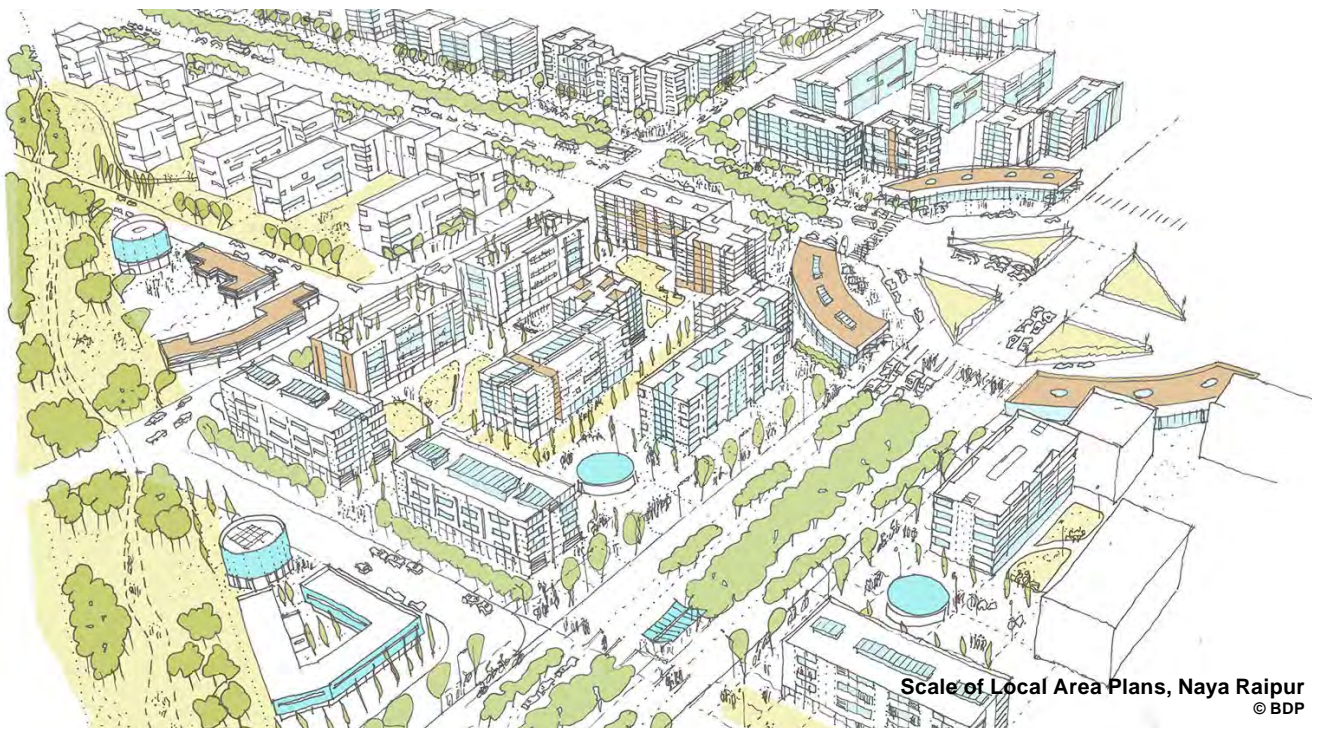
Local Area Plans (LAP)

URDPFI Guidelines recommends that the thrust of micro-planning should shift to

local area plans, which could encourage decentralisation and improve implementation of Development Plans. Because of the 73rd and 74th Constitutional Amendment Act 1992, planning decision and implementation of plans were disaggregated to bring the process closer to the local people. This enhanced the significance of Local Area Plans.

In view of the urgent need for Indian cities to do physical planning for redevelopment of existing 'brownfield areas', preparation of LAPs is necessitated for selected cities under the SCM. LAPs are being looked to as a valuable tool to create a framework for enhancing public spaces, and areas under roads by enabling redevelopment of the existing built-up environment and preparation of a new layout with enhanced infrastructure provision. This could help integrate ITC guidelines in the provisions.

The LAPs under SCM are required to work with tools such as Form Based Codes (FBCs), which address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, the scale and types of streets and blocks, open spaces and streetscapes, tree cover, etc. Similarly the ITC guidelines can be implemented under these LAPs as they will be looking at a barrier free environment for the elderly and people with disabilities. ⁴



LAP features:

- **Applicable for brownfield development**
- **The area under LAP is 50 hectare - 500 hectare or more.**
- **Prepared within one year.**
- **Specify implementation details to comply with the Government Policies.**
- **Framework for recovery of the associated costs for public projects, by mechanisms like levy of betterment charges, charges on additional development rights, and appropriate user charges.** ⁴

Retrofitting of Parks under AMRUT

The purpose of [Atal Mission for Rejuvenation and Urban Transformation \(AMRUT\)](#) is to

- Increase the amenity value of cities by developing greenery and well maintained open spaces (eg. parks);
- Reduce pollution by switching to public transport or constructing facilities for non-motorized transport (eg. walking and cycling); and

- Ensure every household access to a tap with assured supply of water and a sewerage connection.

These outcomes are valued by citizens, particularly women, and the Ministry of Urban Development has prescribed indicators and standards in the form of Service Level Benchmarks.

Besides provision of physical infrastructure, one of the thrust areas of the Mission is enhancing amenity value of cities by creating and **upgrading green spaces, parks and recreation centres, especially for children.** The AMRUT components also consist development of green spaces and parks with special provision for child-friendly components. The milestones to be achieved stipulate development of **at least one Children Park every year in AMRUT cities.**

The Urban Local Bodies need to establish a system for maintenance with local resident participation for parks and open spaces. The public open spaces, parks and playgrounds can be developed / retrofitted with ITC Neighbourhood Guidelines under the AMRUT scheme and can be replicated in city areas.



Layout Plans for Plotted Development

- **Applicable for brownfield development**
- **Perfect places for applying retrofit solutions**
- **Needs a string community support and public participation process**

Layout plans are seen most commonly in residential schemes in Indian cities. They are logically arranged in a systematic manner to give a regular pattern of development in the form of row houses, detached and semi-detached houses and, if necessary, the regular bungalow type sites. The size of the plot depends upon the number of dwelling units to be permitted on each plot and the type of housing needed for a particular city based on general affordability of the people. Retrofitting these layout plans is critical today as many of them have surpassed the capacity of infrastructure they were planned for originally. Local community based groups are very active in these developments and may give ITC infrastructure its due importance. If explicit funding for retrofitting these layouts is provided then they can become interesting pilot areas for application of ITC guidelines.

LONG-TERM POTENTIALS

Long-term potentials should cover a period of 5-10 years for the implementation of projects.

Town Planning Scheme for Greenfield Development under SCM

- **Applicable for greenfield development**
- **The area under TPS - 50 hectare to 500 hectare or more.**
- **Prepared within one year period. Implementation may take longer time.**
- **The cost for providing urban infrastructure and amenities under such TPS can be financed through Value Capture Financing (VCF) tools such as betterment charges and sale of reserved plots. The Ministry of Housing and Urban Affairs has already formulated a Value Capture Policy Framework and started its implementation.** ⁵

Town Planning Schemes (TPS) are being suggested to be prepared and implemented for planned urban expansion in Greenfield areas for selected cities under SCM. The planning



process consists of merging existing land holdings and redistribution of land parcels in a planned manner after making deductions for road right-of-ways and land for public facilities in the urban expansion zone. Land owners derive immense benefits as they receive developed plots within an organized layout, along with all urban services like roads and other urban infrastructure.

Master Plan

Master Plan is a long-term plan prepared under the provisions of respective Town Planning Acts / Development Authority Acts with the purpose of planned development of the city. It is a statutory instrument for guiding planned development and regulating improvement of city for 20 years to cater to the needs of the projected population. Though, the Master Plan primarily focuses on land use planning, but ITCN friendly guidelines can be incorporated by including section on neighbourhood based policies. The implementation of master plan facilitates the orderly and planned development of a city in a sustainable manner, which would ultimately result in good governance.

The Master Plan is detailed out through Zonal Plans and Layout Plans. A neighbourhood comprising of 15000 population with requisite essential facilities for education, health, recreation and services is followed as a planning unit in city planning process.

Master Plan for Delhi 2021, for example, envisages planned city for an environment of convenience and should have a hierarchical cellular structure with nuclei to contain essential facilities and services at different levels. Accordingly, the pattern of **Community Module proposed a residential area of 10000 population**, containing a neighbourhood, with a Senior Secondary school and shopping facilities for daily needs. Higher levels of additional facilities are to be provided at Community / District and Zonal / Sub Zonal levels. Provision of requisite social infrastructure for the neighbourhood planning is governed by the norms and standards prescribed in the Master Plan. It stipulates that

- Community facilities to be provided @ 7.0 sqm / person (2.5 sqm for Public and semi-public facilities and 4.5 sqm for open spaces).
- Provision of 20 tot-lots of minimum size of 125 sqm. each, and Housing Area Park and Play Ground of 5000 sqm each
- Anganwadi (Basic health care centre for mother and young children) at Housing Area level of 5000 population. The location of schools and Anganwadis should be made in the layout plan in cluster form to facilitate sharing of common parking space and playground.

However, since most residential areas were developed during earlier plan periods, these lack ITC facilities, as they have not been effectively provided. Further, Master Plan 2021 does not prescribe specific provision of child friendly infrastructure in neighbourhoods.

In order to meet the needs of increasing population of Delhi, provisions in Master Plan have been amended from time to time by regularizing enhancement in building areas by increasing permissible Floor Area Ratio (FAR), and permitting non-residential activities in residential plots / flats, which has severely affected the built environment in residential neighbourhoods. This has resulted in substantially higher densities in most of the residential areas than planned

for, overcrowding and reduction in open areas and public facilities, particularly child related infrastructure. Mixed Use Regulations stipulated in the Master Plan legally permit commercial and other activities in residential areas.

In the present scenario, it is observed that most of the open areas / parks in residential neighbourhoods are either not maintained or have been encroached upon for parking cars and other activities, with little or no space for play, particularly for the young children. The ITC Neighbourhood Guidelines can be implemented by the urban local bodies in planned areas by initiating awareness programs and involving the RWAs, NGOs, Local Counsellors and public participation.

Suitability of existing policy frameworks for applying ITCN Guidelines

As per the review of the policies affecting the built environment, the following are some key findings about their suitability in relation to ITCN guidelines application:

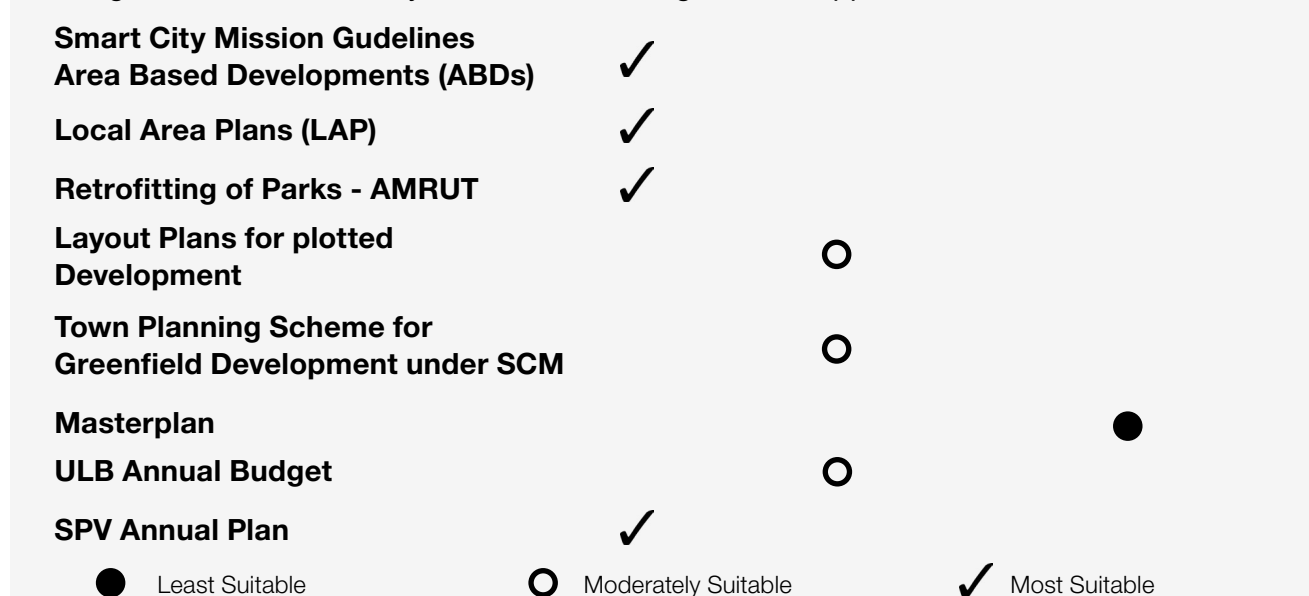


Figure 4.2: Suitability of existing policy frameworks for applying ITCN Guidelines

Notes:

³ Ministry of Urban Development, 2015, Smart City Mission Statement & Guidelines, page 8

⁴ <http://samuchitenvirotech.blogspot.com/2016/05/>

⁵ Ministry of Urban Development, 2018, Pilot on Formulation of LAP & TPS for Selected Cities, page 9 - 12

Guidelines Review

The statutory physical plans mentioned in previous section are made as per some norms and codes that are set at the national level. Some of these codes are mandatory to follow and some are recommendatory in nature. It is important to understand whether these guidelines have norms on ITCs and how thorough they are in relation to ITC-friendly neighbourhood development. A brief description and a detailed review of these guidelines is given below.

URDPFI GUIDELINES

Planning for development is an envisioning process, which requires a sound assessment of the ground realities and providing options for sustainable development within the bounds of the demographic, physical, socioeconomic, jurisdictional and financial aspects. It is a continuous process and must incorporate a regular evaluation of implementation.

The [URDPFI Guidelines, 2014](#) were formulated by the Ministry of Urban Development, keeping in view the emerging scenario in the planned development of cities and towns in India and were intended to be comprehensive for promoting balanced and orderly regional and urban planning, and development. These Guidelines provide the framework, necessary techniques, norms and standards, options for resource mobilization including land assembly approaches, and development promotion regulations. They may not be uniformly applicable to all situations and places, since conditions vary from place to place and even within a settlement. The Guidelines would need to be modified and adopted depending on

local conditions, felt needs and technological innovations so that the planning process may serve as an efficient and dynamic instrument.

The Guidelines stipulate that a planned city for an environment of convenience should have a hierarchical structure, with each unit planned for basic self-sufficiency. The smallest planning unit is conceived as a Housing Area for 5000 population with convenience shopping, open area, anganwadi and milk booth as the minimum infrastructure provision. The higher level of additional facilities is to be provided at the Neighbourhood, Community, District, Zonal, Sub-city and Regional levels. The Neighbourhood is to be planned for a population of 15,000 with the provision of requisite facilities as stipulated in the Guidelines. Design considerations for urban roads, footpaths, cycle tracks are provided in the Guidelines.

NATIONAL BUILDING CODE OF INDIA 2016

The National Building Code contains regulations which can be immediately adopted or enacted for use by various departments, municipal administrations and public bodies. It lays down a set of minimum provisions designed to protect the safety of the public with regard to structural sufficiency, fire hazards and health aspects of buildings. The code also covers aspects of administrative provisions, development control rules and all general building requirements and landscape planning and design and asset and facility management.

Over a period of time, the importance

of providing an environment which is conducive to younger and elder population and persons with disabilities alike has been highlighted. The code covers the provisions on accessibility to facilitate implementation of this important aspect in all public buildings and sustainable built environment. The Code, besides prescribing various provisions, also allows freedom of action to adopt appropriate practices and provides for building planning, designing and construction for absorbing traditional practices, as well as latest developments in knowledge in various disciplines relevant to buildings. The Code has endeavoured to meet the requirements of different regions of the country, both urban and rural, by taking into consideration factors such as climatic and environmental, geographic terrain, protection and improvement of local environments and socioeconomic considerations towards the creation of sustainable human settlements.

BUILDING BYE-LAWS

Building Bye-laws are legal tools used to regulate the coverage, height, building bulk, and architectural design and construction aspects of buildings, so as to achieve orderly development of an area. They are mandatory in nature and serve to protect buildings against fire, earthquake, noise, structural failures and other hazards. In India, there are still many small and medium-sized towns which do not have Building Bye-laws and in the absence of any regulatory mechanism, such towns have excessive coverage, encroachment and haphazard development resulting in chaotic conditions, inconvenience for the users, and disregard for building aesthetics, etc. [Modern Building Bye-laws 2016](#) were formulated by the Town & Country Planning Organisation (TCPO), Ministry of Urban Development, and Govt. of India.

All mandatory master plan/zonal plan regulations regarding use, land use, coverage, FAR, set-back, open space, height, number of stories, number of dwelling units, parking standards etc., for various categories of buildings including modification therein made from time to time shall be applicable mutatis mutandis in the Building Bye-laws regulations under this clause. All amendments / modifications made in the aforesaid regulations shall automatically stand deemed to have been included as part of these Bye-laws.

Building Bye-laws shall apply to building activity in the State/Urban Centre/Town for which they are framed and the same shall be unambiguously specified in the bye-laws. These Bye-laws shall be applicable to all building activities and read in conjunction with any master plan/development plan/regional plan/any other statutory plan in force, and any notifications with regard to the same, and as amended from time to time; and they shall be applicable for a period of five years after which they shall be reviewed. Existing Building Bye-laws will continue to be in force till such time the reviewed Bye-laws are notified.

IRC GUIDELINES FOR URBAN ROADS

[Guidelines for Pedestrian Facilities were published by the Indian Road Congress in 1989](#) and were revised in 2012. The guidelines identified walking as an important mode of transport and in urban areas a significant proportion of trips up to 1-2km length is performed on foot. Pedestrian facilities ensure social equity and enhance the liveliness of urban environment making both business districts and residential neighbourhoods safe and interesting.

Developing a pedestrian environment means

more than laying down a footpath or installing a signal. Accessible design is the foundation and primary concern of pedestrian design hence all pedestrian facilities need to be planned, designed, operated and maintained so that they are usable by everyone, including persons with disabilities or those using mobility aids. Pedestrian facilities need to be provided not only along roads and intersections but in the areas like workplaces, access to transit areas, markets, schools, etc. Pedestrian facilities should be planned in an integrated manner to ensure a continuous pedestrian flow. Pedestrian needs for an area should be looked at as a whole, and an overall strategic plan should be prepared with the basic aim to reduce pedestrian conflict with vehicular traffic to the minimum.

Pedestrian facilities are a critical element in producing a pedestrian-friendly environment. Engineering solutions to improve quality of pedestrian network should take into account the children, families with young children, elderly persons, persons with disabilities and people carrying heavy luggage. Mobility and safety of all the pedestrians including those with disabilities and reduced mobility should be ensured to promote inclusive mobility and universal accessibility.

UNIFIED TRAFFIC & TRANSPORTATION, INFRASTRUCTURE (PLG. & ENGG.) CENTRE (UTTIPEC) GUIDELINES

The Governing Body of Unified Traffic and Transportation Infrastructure (Plg. & Engg.) Centre (UTTIPEC), established in the Delhi Development Authority under the Chairmanship of Hon'ble Lt. Governor approved the ['Pedestrian Design Guidelines'](#) in 2009 as per

the recommendation of the Working Group for immediate implementation, enforcement and uniform adoption by all the road owning agencies. The Guidelines aim to work towards augmenting and strengthening the identified city level targets and frameworks. The goals identified are i) Mobility and Accessibility ii) Safety and Comfort, and iii) Ecology. The Design Toolkit prescribes the components of road infrastructure, pedestrian design guidelines, improvements, etc. Approval from UTTIPEC is mandatory for proposals of Roads, Flyovers and related infrastructure in Delhi.

UTTIPEC Street Design Guidelines are slightly different from pedestrian design guidelines. It promotes principle of human safety, climate comfort, universal accessibility, reducing heat island effect etc. It is already adopted by PWD, CPWD, MCD, NDMC, etc.

Streets are valuable public spaces as well as the movement of corridors. Design of streets is a function of street hierarchy, and adjacent land uses. While recognising that certain design components are non-negotiable, the guidelines outline these components and additional 'world class streets' for pedestrians. Increased pedestrian design considerations in streets would provide an increase in comfort for the walking population, comfortable last mile connectivity from MRTS stations, reduced dependency on cars for short trips, and more equity in the provision of comfortable public spaces and amenities to all sections of society.

Current IRC Guidelines for Pedestrian and Cycle track design provide the base standards for pedestrian and cycle oriented design but need more augmentation. The goals to be achieved by the implementation of these guidelines are: i) Mobility and Accessibility - that maximum number of people should be

able to move fast, safely and conveniently through the city; ii) Safety and Comfort – make streets safe, clean and walkable, create climate-sensitive design; and iii) Ecology – reduce impact on natural environment and reduce pressure on built infrastructure. The Guidelines stipulate detailed provisions for making streets pedestrian friendly.

INSTITUTE FOR TRANSPORTATION & DEVELOPMENT POLICY (ITDP)

The Institute for Transportation and Development Policy works around the world to design and implement high-quality transport systems and policy solutions that make cities more livable, equitable, and sustainable. ITDP is a global non-profit organisation at the forefront of innovation, providing technical expertise to accelerate the growth of sustainable transport and urban development around the world. Through the transport projects, policy advocacy, and research publications, they work to reduce carbon emissions, enhance social inclusion, and improve the quality of life for people in cities. In short, ITDP aims to deliver a higher standard of living and quality of life for citizens of cities around the world.

ITDP's publications on BRT, TOD, and Bike Sharing serve as in-depth, technical resources for governments, developers, and industry professionals, but are often helpful to a wider audience in understanding the concepts and requirements associated with these projects. The concepts and tools provided in these resources can be tailored and applied to programmes throughout the world.

ITDP's manual on '[Better Streets, Better Cities](#)' aims to facilitate the design of beautiful,

safe, walkable, and liveable streets. The manual identifies the different functions of streets and emphasizes the need to design complete streets that provide space for all users. Through the street and intersection templates one can get a sense of how the different elements come together for different types and sizes of streets.

This manual is intended for planners, urban designers, landscape architects, civil engineers, and, most importantly, government officials and citizens who are interested in improving the quality of urban environments and the character of streets in our cities.

Eight principles which guide approach to sustainable transport and development are:

- 1. Walk - Develop neighbourhoods that promote walking**
- 2. Cycle - Prioritize non-motorized transport networks**
- 3. Connect - Create dense networks of streets and paths**
- 4. Transit - Locate development near high-quality public transport**
- 5. Mix - Plan for mixed use**
- 6. Densify - Optimize density and transit capacity**
- 7. Compact - Create regions with short commutes**
- 8. Shift – Increase mobility by regulating parking and road use**

INDIAN GREEN BUILDING COUNCIL (IGBC)

Green New buildings can have tremendous benefits, both tangible and intangible. The most tangible benefits are the reduction in water and energy consumption right from day one of occupancy. Energy savings could range from 20 - 30 % and water savings around 30 - 50%. The intangible benefits of Green New Buildings include enhanced air quality, excellent daylighting, health and well-being of the occupants, safety benefits and conservation of scarce national resources.

The IGBC Green New Buildings rating system addresses the most important national priorities which include water conservation, handling waste, energy efficiency, reduced use of fossil fuels, lesser dependence on usage of virgin materials, and the health and well-being of the occupants. The rating system requires the application of national standards and codes like the NBC, ECBC, MoEF Guidelines, CPCB Guidelines, and several others. The overarching objective is to be better than the national standards so as to create new benchmarks.

[IGBC Green New Buildings rating system](#) is a voluntary and consensus-based programme. The rating system has been developed based on materials and technologies that are presently available. The objective of IGBC Green New Buildings rating system is to facilitate a holistic approach to create environment-friendly buildings, through architectural design, water efficiency, effective handling of waste, energy efficiency, sustainable buildings, and focus on occupant comfort and well-being. The rating system evaluates certain mandatory requirements and credit points using both a prescriptive approach and a performance-based approach.

The rating system has evolved to be both comprehensive and user-friendly.

URBAN GREENING GUIDELINES 2014

[Urban Greening Guidelines](#) were formulated by the Town & Country Planning Organisation (TCPO), Ministry of Urban Development, Govt. of India, in 2014 to facilitate integration and preservation of green spaces and improve the quality of life in cities. Urban greening is an integrated approach to the planting, care and management of vegetation in cities, towns, townships and informal settlements in urban and peri-urban areas.

The objectives of the Guidelines are :

- **to highlight the impact of urbanization on urban greenery;**
- **to suggest practices and methods for protecting and enhancing urban greenery in a sustainable manner;**
- **to identify the key stages in planning and development where urban greenery may be integrated with the built environment; and**
- **to recommend suitable guidelines for enhancing urban greens.**

Urban green spaces provide safe play space for children, contribute to children's physical, mental and social development and play an important role in the basic education of school children with regard to the environment and nature. Well-managed and maintained green spaces create opportunities for people of all ages to interact, enhance cultural life by providing venues for local festivals and civic celebrations, besides meeting varying needs.

The Guidelines also stipulate criteria for selection of tree species for roadside plantation and parking areas, methods of plantation and maintenance of plant material.

Urban Greening Guidelines will act as a model for States and Cities particularly the State Town Planning Departments, Urban Development Authorities and Urban Local Bodies who are responsible for managing them.

GAPS IN EXISTING GUIDELINES

The current system of codes and guidelines do not have a cohesive understanding of ITC specific requirements. Some of them have touched upon them through:

- Pedestrian friendly design guidelines
- Barrier free design guidelines
- Traffic calming guidelines

But none really neither identify ITC as a group nor mention specific guidelines catering to this category of users. This makes the guideline document given above a forerunner in the area of design for ITCs in India.

Gaps that exist in Existing Guidelines						
	Safe	Green	Accessible	Playful	Inclusive	
URDPFI	○	●	○	●	●	
NBC	✓	●	○	●	○	
IRC	●	●	●	●	●	
UTTIPEC	✓	○	✓	○	○	
ITDP	○	○	○	●	●	
IGBC	●	✓	●	●	✓	

● No Guidelines on ITCs ○ Some Guidelines on ITCs ✓ Detailed Guidelines on ITCs

Figure 4.3: Gaps that exist in Existing Guidelines

Institutional Framework

ITC guidelines and their implementation is a novel system for the current urban governance system. There is a need to institutionalise the framework of implementation to effectively apply the potentials mentioned in the earlier section. The SCM timeline for implementation is definitive, therefore the structure within Special Purpose Vehicle is being suggested for short-term potentials application. The Urban Local Body (ULB) as an institutional framework is being looked at for long-term potentials application as it may require some statutory approvals and changes.

URBAN LOCAL BODY (ULB)

Municipal Corporations are created for the administration of big cities like Delhi, Mumbai, Hyderabad and others. A Municipal Corporation has three authorities namely,

- The Council (legislative wing of the corporation)
- The Standing Committee (to facilitate the working of the council)
- The Commissioner (chief executive authority of the corporation)

The council consist of councillors directly elected by people and is headed by a Mayor while the Commissioner is appointed by the state government and is generally an IAS officer (a bureaucrat). The Corporation, with a Mayor and his Councillors transact business in meetings, and its decisions are termed as resolutions for implementation.

Out of the many functions of a ULB, some

functions make it mandatory for a ULB to look at the ITC guidelines integration in the implementation resolutions.

- **Urban planning including town planning;**
- **Provision for urban amenities such as parks, gardens and play grounds;**
- **The laying out and maintenance of public parks, gardens;**
- **Public amenities including street lighting, parking lots, bus stops and public conveniences;**
- **Provision for urban amenities such as parks, gardens and play grounds**
- **The construction, maintenance, alternation and improvements of public streets, bridges, culverts, cause ways and the like;**
- **The lighting, watering and cleaning of public streets and other public places.**

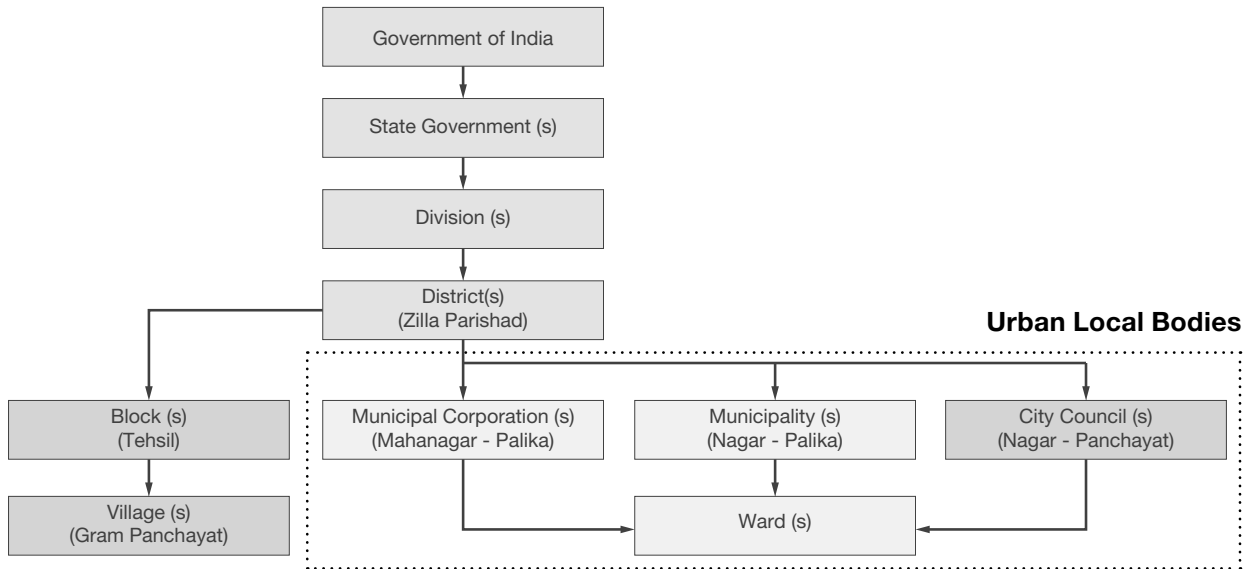


Figure 4.4: Administrative Structure of Indian Governance System

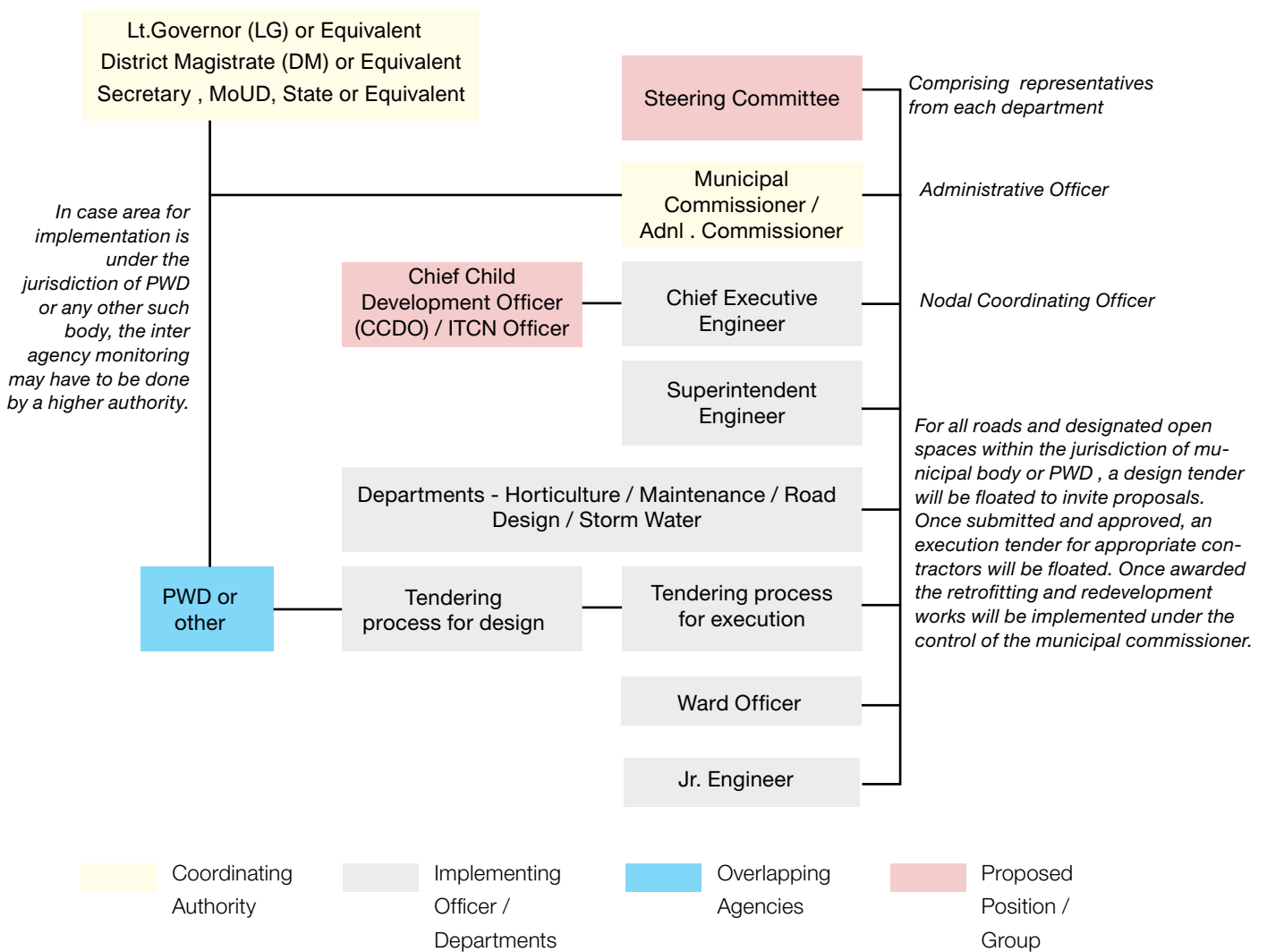


Figure 4.5: Institutional Framework suggestion at ULB Level for implementation of ITCN Guidelines

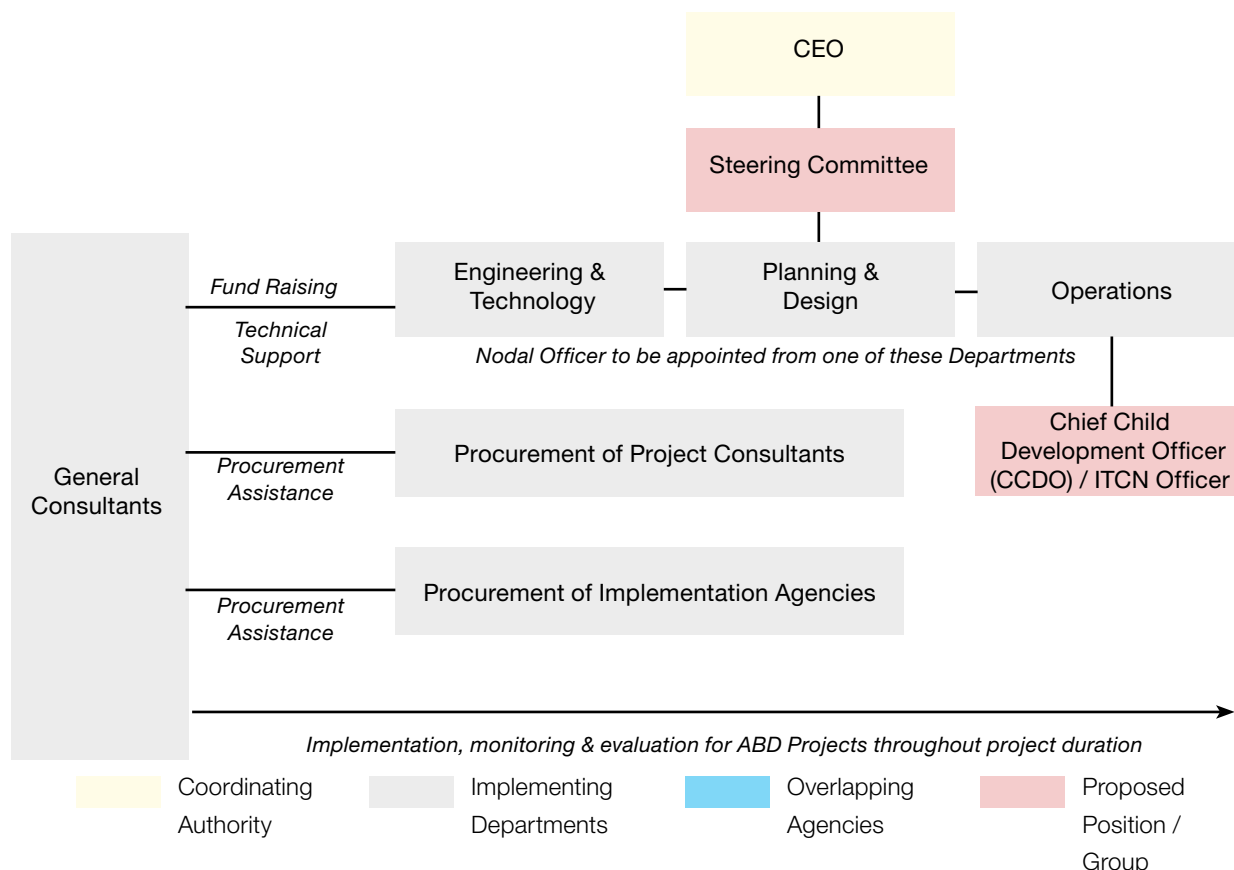


Figure 4.6: Institutional Framework suggestion at SPV Level for implementation of ITCN Guidelines

SPECIAL PURPOSE VEHICLE (SPV)

The implementation of the Smart Cities Mission at the city level will be undertaken by a Special Purpose Vehicle (SPV) created for the purpose. The SPV will plan, appraise, approve, release funds, implement, manage, operate, monitor and evaluate Smart City development projects. The SPV can act as a key institution to manage the implementation of the ITC guidelines.

Each Smart City will have a SPV which will be headed by a full time CEO and have nominees of Central Government, State Government and ULB on its Board. The State/ULBs shall ensure:

- (i) A dedicated and substantial revenue stream is made available to the SPV to make it self-sustainable and so that it could evolve its own credit worthiness for raising additional resources from the market
- (ii) Government contribution for Smart Cities is used only to create infrastructure that has public benefit outcomes. The execution of projects may be done through joint ventures,

subsidiaries, public-private partnership (PPP), turnkey contracts, etc., suitably dovetailed with revenue streams.

The SPV will be a limited company incorporated under the Companies Act, 2013 at the city-level, in which the State/ UT and the ULB will be the promoters having 50:50 equity shareholding. The private sector or financial institutions could be considered for taking equity stake in the SPV, provided the shareholding pattern of 50:50 of the State/ UT and the ULB is maintained and the State/ UT and the ULB together have majority shareholding and control of the SPV.

It is important to understand the relevance and importance of a Chief-Child Development or ITCN Officer for a city and neighbourhood. There are various aspects related to governance, policy-making and political agenda while a city is tried to be made an ITC-friendly one. These elements and further

cross-sectoral collaborations amongst various governmental and private organisations gain a greater momentum, when the whole approach and execution is led by someone already part of the city municipal team. Henceforth, it successfully creates a platform to review the data and act on it efficiently.

Chief-Child Development Officer (CCDO)⁶ / ITCN Officer

Role

- The CCDO/ITCN Officer is a full-time position within city government dedicated to managing the coordination of early childhood policies across city agencies.
- The CCDO/ITCN Officer reports directly to the Municipal Commissioner's or equivalent's office. This is important for the CCDO/ITCN Officer to have significant impact over city department heads.
- CCDO/ITCN Officer has experience in team-management, cross-sectoral work, mediation, policy change, communication if possible. She/He does not necessarily have a deep ECD knowledge, but it is preferable to have some. For technical ECD knowledge requests, the CCDO/ITCN Officer should be able to reach out to experts or expert organisations.

Responsibilities

- Organises regular meetings on early childhood with relevant department heads.
- In charge of following-up with them about their respective commitments.
- Sharing progress reports to the Mayor's office.
- Acts as contact person and coordinator for all early childhood related policies.
- Coordinates city communication on early childhood.
- May represent the city government in community engagement processes related to early childhood development/families with young children.
- Organises knowledge training on ECD for relevant city staff.
- Acts as trusted intermediary with external organisations supporting ECD (such as BvLF)
- Pro-actively supports the integration of early childhood development principles in municipal planning processes, laws.
- Acts as internal subject matter expert within municipality and provides early childhood perspective and review on major city projects and policies.

Notes:

⁶ www.bernardvanleer.org/app/uploads/2018/05/Urban95-Starter-Kit.pdf

BUDGETING & FUNDING

In India, urban local bodies are the agencies responsible for local governance. Budgets of urban local bodies are debated and approved official documents, as well as legal documents. Budgets are short-term plans (typically covering only one year), expressed in financial terms which have been used for a long time by governments. Budgets include revenues and expenditures and are prepared at the end of a financial year for the coming year.

In order to implement ITC Neighbourhood Guidelines, it will be necessary to promote specific percentage allocation for young children infrastructure in the overall budget by the Urban Local Body which will provide resources to city officials to develop and maintain such infrastructure for the children as a whole in the community / neighbourhood.

Funding

The funding from central government and equal amount from state government shall be in the form of grants admissible to the selected cities, which will be released in three instalments. The expenditure for formulation of Local Area Plan and Town Planning Scheme shall be funded by the MoHUA from AMRUT/ CBUD. An amount of Rs 50 crore would be provided at the rate of Rs 2 crore per city by the MoHUA for the identified 25 cities for preparing Local Area Plan and Town Planning Scheme. Cost of creation of any infra-structure like services, roads and other infrastructure for implementation of the urban expansion or redevelopment plans is not to be included under this pilot. All components inadmissible under AMRUT will also be inadmissible under the pilot which is spread over a period of three years.

Innovative methods of funding

The total revenues of all Urban Local Bodies (ULBs) in India amount to less than

Rs. 1,50,000 crores, approximately, 1% of India's GDP. Various ways of augmenting the resources of the municipal bodies in the country, include:

- Essential reforms in the property tax system.
- Adequate exploitation of user charges and fees for various services delivered.
- Strengthening and improving central and state transfers to urban local governments.
- Judicious use of development charges and effective collections from public lands are recommended in general.
- Development of the municipal bond market is also advocated for financing capital expenditures.
- AMRUT reforms are some of the steps taken by Government towards financial strengthening of these ULBs.

There is also a need to explore alternative sources of revenue generation by the municipalities such as entertainment tax, mobile towers, user charges for solid waste, water, parking, value capture financing, etc. These initiatives would be essential for implementation of the ITC Neighbourhood Infrastructure in cities.



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STAKEHOLDERS RELEVANT TO ITC WELFARE

The limited success of Ward Development Committees (WDCs) institutionalized through the 74th CAA to usher in decentralized governance has led to the growth of middle class activism through Resident Welfare Association (RWAs) as partners in the development process of cities. While being non-existent in many cities, WDCs have not succeeded in ushering peoples' participation in local government in cities where they are functional.

Partnerships between different organisations including civil society organisations (CSOs) such as NGOs and neighbourhood associations (NAs) like RWAs, have been perceived as an effective participatory model as people in a locality or belonging to a group with common views can see their interest being served by these organisations.

The stakeholders can be brought together at a neighbourhood level in form of

- ITC Awareness Programmes
- ITC Friendly Activities Initiative
- ITC Group Needs Workshop
- Benchmarking Meetings to ascertain Surviving, Striving & Thriving status of the neighbourhood.

Public Sector Stakeholders

- ULB
- Municipal Commissioner
- Mayor
- Elected Representatives
- Local Councillors
- Ward Level Committees

Private Sector Stakeholders

- Developers
- Investors
- Knowledge Institutions

Non-Profit Groups

- Caregivers
- Community Based Organisations, CBOs
- Civil Society Organisations, CSOs
- Neighbourhood Associations, NAs
- Resident's Welfare Associations, RWAs
- NGOs

Built Environment Professionals

- Urban Planners
- Urban Designers
- Architects

Stakeholder Actions and Opportunities



The diagram above sets out a sample of actions that can be adapted by stakeholder groups for an enhanced ITCN development process.

Figure 4.7: Stakeholder Actions and Opportunities



PROCESS MANAGEMENT

Capacity Building

One of the main challenges for implementing the above strategies is the lack of appropriate capacity at the state and local level. The use of new planning techniques such as LAP, TPS and FBCs would require significant training and capacity building of planners. It would also be essential to ensure that only those professionals who are trained in the knowledge and implementation of these tools are charged with the responsibility of preparing and overseeing them for their respective cities / urban areas.

Public Participation

For working at a neighbourhood level the local community mostly becomes the most powerful

group of stakeholders. It is very critical to understand their participation in the design process. Any addition to the neighbourhood design should be able to cater to all the residents equally without impinging on their basic services and needs.

Inter Departmental Coordination

Different parts of urban development are built and maintained by different departments in the governance system. Holistic plans which include interventions in all these parts may create a 'passing the buck' scenario. It is therefore of utmost importance that a nodal or special agency takes ownership of execution or maintenance in consultation with all the departments. A system of maintenance can be decided upon which may involve inter departmental coordination and assistance.

Insights from Bernard van Leer Foundation country representatives and Urban95 local partners on the different initiatives supporting inter-agency collaboration within Urban95 partnerships.

Main examples of inter-agency coordination in Urban95:

- Tel Aviv - Yafo and Tirana: Chief Child Development Officer (CCDO)
- Recife: Inter-agency committee on early childhood at mayor level, and municipal legislation for early childhood.

Learnings on inter-agency coordination for Urban95:

- Early childhood is backed at political leadership level, which means the support of the mayor (or relevant political leader) is clear and expressed through official city communication channels as an inter-sectoral and overarching topic. This is the case in Tel Aviv, Tirana and Recife. In Recife, the city has passed a municipal law enshrining early childhood as an intersectoral topic of priority.
- The coordination mechanism relates directly to the mayor, preferably with a full-time coordinator (CCDO) dedicated to organising meetings and following-up with each department head. The CCDO reports to the mayor and has the power to hold department heads accountable.

- The departments involved include health and education (traditional early childhood sectors) but also transportation, planning, parks and gardens and social services.
- Meetings on early childhood are regular and not convened only in exceptional circumstances. The meeting can be integrated into larger issues but there is a dedicated time to address early childhood. In Recife, such meetings happen every two weeks, as part of a larger meeting with all department heads.
- The head of departments are presented with data connecting early childhood development and their respective departments. In Recife, a screen shows a picture of the intervention or area being discussed, while another one displays early childhood data from the city dashboard, and a third tracks commitments and discussions made during the meeting by each department head.
- ECD knowledge training is provided to head of departments and their teams' key implementers to help them identify how they are effectively brain-builders. This can take the form of one-off training sessions, workshops, study tours, etc.

EXAMPLES OF IMPLEMENTATION WORKS

Bhagidari Scheme, Delhi

Bhagidari was a 'program of partnership' between government agencies and the citizens of Delhi. The 'government agencies' include the Government of Delhi and its departments, local municipalities (Municipal Corporation of Delhi and New Delhi Municipal Council), Delhi Development Authority, and utility agencies and companies (Delhi Jal Board and Power Distribution Companies). Citizens were represented by neighbourhood associations called Resident Welfare Associations (RWA); Market and Trader Associations (MTA), Industrial Associations, Village Groups and NGOs. The main focus of the program however had been on RWAs, especially those from the planned parts of the city.

Although Bhagidari scheme had diversified to other sectors like education, health, industry etc., RWAs continued to be the only institutions that represented neighbourhoods. The program started with 20 RWAs in 2000 and had grown to more than 1900 RWA. The implementation of the program was carried by a professional organisation called Asian Center for Organisational Research and Development (ACORD) that specialized in change management in large organisations.

Implementation mechanisms included workshops with RWAs and government agencies, and the institution of special cells within each participating government agency.



RWAs were chosen for implementation of the program for two reasons. The first concerns the issue of scale; the second is based on legality. RWAs were the only institutions that represented citizens at the neighbourhood level. Since these organisations were already involved in civic issues of their respective neighbourhoods, it gave a common entry point to begin this process.

Raahgiri Event

Raahgiri is India's first sustained car-free citizen initiative that began in Gurgaon on Nov 17, 2013. The movement was conceived and is trademarked with the [Raahgiri Foundation](#), consisting of local inhabitants from five organisations – EMBARQ India, I Am Gurgaon, Pedalyatri, Heritage School Gurgaon, Duplays Gurgaon.

It was not long thereafter that this weekly event, that closes streets to cars in the name of sustainable and active transport, arrived in the world's second largest city – New Delhi. The New Delhi Municipal Council (NDMC) together with the New Delhi Police Department took the lead in hosting car-free Sundays in the inner circle of New Delhi's Connaught Place each week, beginning 13th July 2014. Expanding the movement from Gurgaon (population 800,000 people) to New Delhi (population 22 million), has definitely been a huge leap, one that reminds us that reorienting cities around people – not cars – is achievable.

On 12th July, 2015, this movement completed one year in Connaught Place. Moving from a turnout of 5000 people, at the first Raahgiri in Connaught Place, to 20,000 people today, the movement has shown tremendous growth. This has also started New Delhi on an important path towards combating air pollution and improving public health, and moved all of India one step closer towards being an exemplar of sustainable urban development for other emerging economies.

Paramarathi, Dwarka

[Parmarathi](#) is a cleanliness NGO in Dwarka, Delhi. Parmarathi adopts spaces like foot paths, open spaces, roads etc. which are lying in a state of dereliction and cleans them for effective utilisation by the locals.



Possible Policy Proposals for ITCNs

POLICY LEVEL RECOMMENDATIONS

The analysis of the existing policies and frameworks can be summed up in some key recommendations listed below:

Institutionalising ITC Provisions

- Institutionalising provision for Chief Child Development Officer / ITCN Officer at ULBs
- Mandatory annual budget allocation at ULBs for ITC friendly infrastructure development

Integration of ITC guidelines with existing policies

- Adopt national strategy for child-friendly neighbourhoods development
- Provision of ITC friendly spaces in all new and brownfield park development under AMRUT Mission
- Mandatory provision to incorporate ITC aspects in City Development Plan
- Mandatory provision to incorporate ITC aspects in City Mobility Plan
- Application of standards, guidelines on ITC in new and old neighbourhood development
- Amendment or additions of specific ITC infrastructure to existing built environment norms like URDPFI etc. Refer Neighbourhoods Section of Design Guidelines for specific recommendations.

Page 19-21

Data Management of ITC Indicators

- Regular monitoring and evaluation of ITCN data indicators

- Regular assessment of the progress made by the neighbourhood - from surviving to thriving benchmark levels.
- Development of ITC Dashboard - The ITC dashboard moves measurements into management by providing a visual and comprehensive comparison of performance between neighbourhood, wards, zone, cities and time series data for evidenced based planning.

Application of ITC Guidelines

- Build more learning environment in the neighbourhood
- Integrated playable space throughout the public realm
- Support and promote street play – promoting temporary street closure projects like Raahgiri
- Mandatory child day care centre with outdoor play facilities
- Mandatory traffic calming design for local street and collector streets
- Promote safe roads to pre-primary school, parks and play spaces
- Promoting multi functional spaces in neighbourhoods – opening school playgrounds after school hours

The impact of these policy recommendations for ITCs will gradually create a climate for neighbourhood level improvements and subsequently pan city atmosphere for families.

The implementation flow of these recommendations has been illustrated on the facing page.



Figure 4.8: Policy Proposal

List of Figures

Figure 4.1: Pan City and Area Based Development Projects of Top 20 cities under SCM ⁴	12
Figure 4.2: Suitability of existing policy frameworks for applying ITCN Guidelines	16
Figure 4.3: Gaps that exist in Existing Guidelines	22
Figure 4.4: Administrative Structure of Indian Governance System	24
Figure 4.5: Institutional Framework suggestion at ULB Level for implementation of ITCN Guidelines	24
Figure 4.6: Institutional Framework suggestion at SPV Level for implementation of ITCN Guidelines	25
Figure 4.7: Stakeholder Actions and Opportunities	29
Figure 4.8: Policy Proposal	35

List of Tables

Table 4.1: Existing ITC Welfare Policies & Guidelines	9
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Cover Photograph by David Ulfers flickr.com
Released February 2019
Version 1.0

