Annexure 2 (Self-Assessment) REF: Question 7 & 8

	City Parameters	Current Status	Column I Basis for assessment and/ or qualitative indicator(Optional)	Column J Projection of 'where the City wants to be' with regard to the feature/ indicator	Column K Input/ Initiative that would move the city/ area from its current status to Advanced status (scenario 4)
1	**Citizen Participation** - A smart city constantly shapes and changes course of it's strategies incorporating views of its citizen to bring maximum benefit for all (Guideline 3.1.6)	**Scenario 2** City undertakes citizen participation with some select stakeholders. The findings are compiled and incorporated in some projects or programs. Very few major decisions are shared with citizens until final projects are unveiled	Citizen engagement has been the cornerstone behind evolution of NDMC'S policies, projects (eg, Bhagidari).	City constantly conducts citizen engagement with people at each ward level to incorporate their views and these shape priorities and development projects in the city. Multiple means of communication and getting feedback - both face-to-face and online are utilised. The effectiveness of city governance and service delivery is constantly enhanced on the basis of feedback from citizens.	• Citizen Smartphone Application aimed at participative Governance: • An updated NDMC Mobile Citizen Application is envisaged to inspire active citizen involvement, improve the value of government services by encouraging citizen input and suggestions. The application is expected to cover all services currently being delivered by NDMC as well as information on places to visit, car-pooling, parking and ongoing events in NDMC
2	**Identity and Culture** - A smart city has an unique identity which distinguishes it from all other cities, based on some key aspects, its location or climate: its leading Industry. its heritage. its local culture or cuisine or other factors. This identity allows an easy answer to the question "why in this city and not somewhere else?" A smart city celebrates and promotes its unique identity and culture. (Guideline 3.1.7)	**Scenario 3** Historic and cultural heritage resources are preserved and utilised and their surroundings are well maintained public spaces. Public buildings and amenities reflect the cultural identity of the city.	NDMC has a total of 304 heritage buildings and complexes identified by the INTACH 2000 (Appendix 2 & 3) List of Historic Buildings of Delhi, as well the Connaught Place area, the Central Vista, New Delhi Bungalow Zone and also the Lodhi Gardens and the Delhi Golf Club which have been identified as Conservation Areas in the INTACH 2000 List.	Built, natural and intangible heritage are preserved and utilised as anchors of the city. Historical and cultural resources are enhanced through various mediums of expression. Public spaces. Open Spaces. Amenities and public buildings reflect local identity and are widely used by the public through festivals, events and activities.	• Organize an International Delhi Festival highlighting the historic and cultural identity of New Delhi • Improved signages envisaged in multiple languages • Happiness areas/ Wellness Areas within NDMC • Gateway to the World – to strengthen inter country ties • Inducing behavioural change in citizens through innovative measures
3	**Economy and Employment** - A Smart city has a robust and resilient economic base and growth strategy that creates large-scale employment and increases opportunities for the majority of its citizens (Guidelines 2.6, 3.1.7 & 6.2)	**Scenario 3** There are adequate job opportunities for all sections of society. But skill availability among residents can sometimes be a challenge.	Most of the residents in NDMC are employed as government servants. Additionally, a significant portion of employment is generated from the retail, entertainment and hospitality sector within Connaught Place, Yashwant Place, Sarojini Nagar, Bengali Market etc.	There are adequate opportunities for jobs for all sections of income groups and skill levels, job oriented skill training supported by the city and by industry. Economic activities are suited to and build on locational and other advantages of the city.	• Universal accessibility to ensure that people with disabilities and elderly have equal access to commercial areas, thereby increasing sales volume and profits for businesses in NDCC • Employment opportunities for e-commerce, florists, cafes, ice-cream parlours, pathological labs,

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					thereby aiding NDCC in generating additional revenue
4	**Education** - A Smart City offers schooling and educational opportunities for all children in the city, (Guidelines 2.5.10)	**Scenario 3** City provides adequate primary and secondary education facilities within easily reachable distance for most residential areas of the city. Education facilities are regularly assessed through - databases of schools including number of student. attendance, teacher- student ratio, facilities available and other factors	There are 14 Primary Schools, 1 Middle Day Boarding school and 8 secondary schools spread over NDMC area. In addition to this 13 Senior Secondary Schools are also run by NDMC. There are 4 Nursery Schools and in 33 Schools Nursery Sections are attached. In addition to this, NDMC runs 7 Sr. Secondary, 1 Secondary & 3 Primary Navyug schools under Navyug School Education Society for the gifted children of the weaker section of the society.	City provides adequate and high-quality education facilities within easily reachable distance of 10 minutes walking for all the residential areas of the city and provides multiple options of connecting with specialized teaching and multimedia enabled education. Education facilities are regularly assessed through-data base of school including number of students, attendance. teacher-student ratio. facilities available and other factors	• Introduce the following smart features in NDMC schools: - Centralised Digital Library - Smart health for students - Centralized Student's health records in Electronic form • Improvement of last mile connectivity thereby providing a medium for students to travel between metro station and schools
5	**Health** - A Smart city provides access to healthcare for all its citizens (Guidelines 2.5.10)	**Scenario 3** City provides adequate health facilities within easily reachable distance for all the residential areas and job centers of the city. It has an emergency response system that connects with ambulance services	Primary Urban Health Centre caters to urban population of 30000- 75000 population. (NDMC) 13 Allopathic Dispensaries, 7 Mother and Child Welfare Centres, 8 school health zones, 11 Ayurvedic Dispensaries &12 Homeopathic Dispensaries (NDMC)	City provides adequate health facilities at easily accessible distance and individual health monitoring systems for elderly and vulnerable citizens which are directly connected to hospital to prevent emergency health risk and to acquire specialized health advice with maximum convenience. The city is able to foresee likely potential disease and develop response systems and preventive care.	• Implementation of the following initiatives: - Centralized medical facilitation for access to essential healthcare for EWS - e-healthcare and - Virtual Hospital with network of volunteer doctors, blood donors and real-time repository of blood in blood banks
6	**Mixed Use** - A Smart City has different kinds of land uses in the same place such as offices. housing and shops clustered together (Guidelines 3.1.2)	**Scenario 2** In some parts of the city there is a mixture of land uses that would allow someone to live, work and shop in close proximity. However, on most areas there are only small retail stores with basic supplies near housing. Most residents must drive	Delhi Master Plan 2021 regulations for Zone D	NA	• Mixed land-use is not permitted in considerable areas of NDMC under the Master Plan of Delhi, & Lutyen's Bungalow Zone (LBZ) restrictions keeping in mind the unique architectural, historical and heritage character and significance. Therefore in the sections where there is planned

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		or use public transportation to access a shop for food and basic daily needs. Land use rules support segregating housing retail, and office uses, but exceptions are made when requested.			redevelopment, have mixed use can be brought about through combining affordable housing with Startups
7	**Compact** - A Smart city encourages development to be compact and dense, where buildings are located close to one another and are ideally within a 10-Minute walk of public transportation forming concentrated neighbourhood	**Scenario 3** The city has multitude high density dusters that are easy to walk around where buildings are close together. However, the city actively encourages development to occur on under-utilized parcels of land into high-density walkable areas. When new formal large-scale development projects happen at the periphery, they are encouraged to be dense and compact, with buildings that are close together and line and streets. The city actively encourages or incentives re- development of under-utilized parcels in the inner-city especially those located close to public transportation.	Delhi Master Plan 2021 regulations for Zone D	NA	• NDMC has been planned with a low-medium density development. Being the capital of India, it is the center of government activity and also includes the international embassies and important institutions. Hence, special regulations apply with regard to land use densities. • However there are certain areas within the city that can be made walkable
8	**Public Open Spaces** - A smart city has sufficient and usable public open spaces, many of which are green that promote crease and outdoor recreation for all age groups. Public open spaces of a range of sizes are dispersed throughout the city so all citizens can have access (Guidelines 3.1. 4 & 6.2)	**Scenario 4** Public open spaces are well dispersed throughout the city. Every residential area and work space has access to open space within 10 minutes walking distance. Open spaces are of various types-natural, green plazas, parks, or recreation areas - which serve various section of people. public spaces tend to truly reflect the natural and cultural identity of the city	NDMC has one of the best facilities for open spaces within the country including Lodhi Garden, Nehru Park, Talkatora Garden, Sanjay Jheel Park, Central Park Connaught Place, Children Park of India Gate and Shanti Path. In addition, there are more than 980 parks of CPWD Colonies, 124 parks of NDMC, 50 Roundabouts and Lawns of North Avenue, South Avenue, greens around Rashtrapati Bhawan, Parliament House, etc. There are also green strips of 137	NA	The following initiatives are planned to enhance the usability and access to public market • Reclamation of sidewalks, parks, plazas, and commercial areas • Landscaping of public open spaces shall be done through grey water used for horticulture. Dual piping shall be used for providing grey water for horticulture in the area. • Redesigning the existing built environment at Connaught Place to create provision for NMT infrastructure

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			roads and lanes of New Delhi including Avenue Trees.		
9	**Housing and Inclusiveness** - A Smart City has sufficient housing for all income groups and promotes integration among social groups. (Guidelines 3.1.2)	**Scenario 2** Housing is available at most income levels but is highly segregated across income levels. Population growth slightly exceeds the creation of new housing. The wealthy and the middle class have housing that meets their needs at costs appropriate to their income. The poor live in informal settlements.	24 JJCs exist within NDMC zone	A wide range of a housing is available at all cost levels. The supply of housing is growing at pace with population. Affordable, moderate, and luxury housing are found clustered together in many areas of the city.	• Redevelopment of identified JJCs is envisaged through construction of EWS units at Bakkadwala • In-situ redevelopment subject to readiness of participation of land owning agencies
10	**Transport** - A smart City does not require an automobile to get around; distances are short, buildings are accessible from the sidewalk, and transit options are plentiful and attractive to people for all income levels. (Guidelines 3.1.5 & 6.2)	**Scenario 3** Network of streets are fairly complete. Public transport covers most areas of the city. However last mile connectivity remains incomplete and affects transport options. Footpaths are accessible in most areas, whereas concerns of safe crossings and security throughout the day remain. Parking zones are demarcated but absence of pricing increases over utilization of parking lots.	High percentage of area reserved for roads in the Delhi Master Plan 2021.	Street network is complete and follows a clear structure. Public transportation network covers the entire city and intensity of connection relates with the demand. Plenty of options of public transport are available and affordable for all sections of the society. There is a multi-modal integration at all mass transit stations and organized-priced on street and off street parking. Walking and cycling is prevalent.	• Last mile connectivity within NDMC to be enhanced through Electric Vehicles/ non-motorized vehicles (NMV) • Parking: Dedicated Electric Vehicles (EV) charging nodes are envisaged at NDMC parking lots; • The energy requirements for charging EVs at each node are to be met through installation of solar panel installed on nearby rooftops
11	**Walkable** - A Smart City's roads are designed equally for pedestrians, cyclists and vehicles; and road safety and sidewalks are paramount to street designs. Traffic signals are sufficient and traffic rules are enforced. Shops, restaurants, building entrances and trees line the sidewalk to encourage walking and there is simple lighting so the pedestrian feels safe day and night (Guidelines 3.1.3 & 6.2)	**Scenario 3** The city has good network of pavements and bike lanes. Buildings in most areas of the city are easily accessible from the pavement. However, traffic signals are sometimes disobeyed and it can feel difficult to cross the street.	High percentage of area reserved for roads in the Delhi Master Plan 2021.	The city is highly walkable. Pavements exist on every street and are maintained. Trees line many sidewalks to provide shade for pedestrians. Buildings in most areas of the city are easily accessible from the sidewalk. Traffic signals control the flow of automobiles and are enforced. A network of bike lanes exists to promote cycling as a means of transport. Traffic rules are followed and enforced with great seriousness.	• Facilities for access to visually impaired, senior citizens and differently abled individuals are envisaged within all public spaces • Exclusive pedestrian zones are envisaged in Connaught Place area

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12	**IT Connectivity** - A Smart City has robust internet networking allowing high-speed connections to all offices and dwellings as desired (Guidelines 3.1.3 & 6.2)	**Scenario 3** The city has high speed internet connectivity available in most parts of the city.	Pilot project at CP, Khan Market and select stretched conducted for city-wide WiFi	The city offers free Wi-Fi services to provide opportunity for all the citizens to connect with high speed internet across the city.	• Wi-fi hotspots are envisaged in key public areas. • Networking of medical facilities, schools and offices
13	**Intelligent Government Services** - A Smart City enables easy interaction (including through online and telephone services) with its citizens, eliminating delays and frustrations in interactions with government. (Guidelines 2.4.7 & 3.1.6 & 5.1.4 & 6.2)	**Scenario 2** Some of the public services are provided online and infrastructure for total digitalization is not in place. Service delays occur regularly in some sectors. Responses to citizen inquires or complaints are often delayed. No integration between services and billing.	• 11 web-based services currently functional. • 13 Citizen Facilitation Centres (CFCs) online with dedicated 220 mb lease line • 'PleaseFix' mobile app functional for grievance redressal. • Grievances monitored through Central CRM	All major services are provided through online and offline platforms. Citizens and officials can access information on accounting and monitor status of projects and programs through data available on online system. Robust data infrastructure system shares information and enhances internal governmental coordination.	• A hierarchical Command & Control centre is planned to integrate smart solutions for service delivery to citizens. • The NDMC Mobile Citizen App is envisaged to improve the value of government services by encouraging prompt response to citizen enquiries and complaints
14	**Energy Supply** - A Smart City has reliable, 24/7 electricity supply with no delays in requested hookups. (Guideline 2.4)	**Scenario 3** Electricity is available in most parts of the city for most hours of the day but some areas are not so well-served. Smart metering exists in some parts of the city but not all.	• 24x7 electricity supply is available without and planned outages	Electricity is available 24x7 in all parts of the city with smart metering linked to online platforms for monitoring and transparency.	• Smart Metering is envisaged for individual energy consumers within NDMC
15	**Energy Source** - A Smart City has at least 10% of its electricity generated by renewables. (Guidelines 6.2)	**Scenario 2** The city is preparing plans for ensuring that it gets more energy from renewable sources and is in the process of making commitments in this regard	• NDMC expects to generate almost 8MW rooftop solar energy • Installation of 40 MW Solar Plants	At least 10% of the energy used in the city is generated through renewable sources. The city is undertaking long-term strategic projects to tap renewable sources of energy in its region/ beyond to increase the percentage of renewable energy sources	• Introduction of Smart Grid is envisaged to meet electricity demand in a sustainable, reliable and economic manner • Energy conservation measures are proposed through rooftop solar panels on schools, government and institutional buildings within NDMC area.
16	**Water Supply** - A smart City has reliable, 24/7 supply of water that meets national and global health standards. (Guidelines 2.4 & 6.2)	**Scenario 2** The city has intermittent water supply and availability. However it is setting targets and processes in	• Water supply coverage increased from 87% in 2013 to 100% in 2015	The city has 24x7 treated water supply which follows national and global standards and also available in sufficient quantity and affordable	• 24x7 water supply is planned for NDMC - Web Based Centralised Monitoring System with Instrumentation & SCADA to be

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		place to try improve its water supply. Unaccounted water loss is less than 30%	• Non-revenue water (NRW) reduced to 20% in 2015 from 39% in 2013	across all sections of the society. Unaccounted less than 15%	included for distribution management & reduction in unaccounted water supply (UFW) - Water Quality monitoring is also envisaged on a day-to-day basis
17	**Water Management** - A Smart city has advanced water management programs, including smart meters, rain water harvesting and green infrastructure to manage storm water runoff. (Guidelines 6.2)	**Scenario 1** The city does not measure all its supply. It does not recycle waste water to meet its requirements and rain water harvesting is not prevalent. Flooding often occurs due to storm water run-off.	The city is at Scenario 3 with respect to rainwater harvesting. However, 100% metering is being undertaken.	The city has meters for all its water supply. It includes smart mechanisms to monitor remotely. Rainwater harvesting systems are installed and utilised through the city and storm water is collected and stored in water bodies and treated for usage. Recycled waste water is supplied for secondary uses.	• Smart Metering for individual water supply connection is proposed within NDMC • Recharging of existing local water bodies through Smart Mini STP's
18	**Waste Water Management** - A Smart City treats all of its sewage to prevent to polluting of water bodies and aquifers. (Guideline 2.4)	**Scenario 2** Most waste water is collected and treated before disposal. However the treated water does not meet standards and is not recycled for secondary uses.	Less than 50% of entire sewage of Delhi is being collected and treated (CPCB)	The city has zero waste water because all the waste water is collected, treated and recycled. It meets standards and reduces the need for fresh water.	• Reuse of waste water (80MGD) through Smart mini Sewage treatment Plants (STPs) • Minimize use of potable water for horticulture • Introduce alternate pipeline for grey water
19	**Air Quality** - A Smart City has air quality that always meet international safety standards. Guideline 2.4.8)	**Scenario 1** City does not have plans, policies or programs to improve the air quality. Systems to monitor air quality are absent.	• Mercer's 2015 annual quality of living survey, ranks New Delhi 154 out of 230 cities due to bad air quality and pollution. • According to the Ministry of Earth Sciences, Delhi's air quality index (AQI) is 121, which is described as poor.	The city has clean air by international standards. Live air quality monitoring cover the entire city and data of air quality are mapped.	• Appropriate solutions envisaged with the collaboration of Delhi Government & Government of India • Air quality tweet of pollution level • Reduction of air pollution by discouraging or restricting access of motorized vehicles in designated areas • Provide a platform for carrying out activities for changing people's behaviour and sensitizing them towards environmental issues

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20	**Energy Efficiency** - A Smart city government uses state of the art energy efficiency practices in buildings, street lights and transit system. (Guideline 6.2)	**Scenario 2** The City promotes energy efficiency and some new buildings install energy efficiency systems that track and monitor energy use and savings.	• LED lighting introduced in Government buildings, street light • Distribution of 1,40,000 LED bulbs under DELP scheme	All the existing old and new public buildings employ energy efficiency principles in development and operation and apply for energy rating by national and international forums. Many non-public buildings are also energy efficient because the govt. promotes energy efficiency through incentives and regulations.	• Energy efficient street lighting using LED • Generation of clean energy through solar
21	**Underground Electric Wiring** - A Smart City has an underground electric wiring system to reduce blackout due to storms and eliminate unsightliness. (Guideline 6.2)	**Scenario 4** More than 90% of the city has underground electric wiring system.	• The distribution system for electricity is entirely through underground cables within NDMC area. • Service utility corridor (tunnel) built in Connaught Place to include electricity & other major utility lines	NA	• Proposed Regulatory Intervention – Wire-free facades of all buildings in NDMC
22	**Sanitation** - A Smart City has no open defecation, and a full supply of toilets based on the population. (Guideline 2.4.3 &6.2)	**Scenario 4** Sanitation facilities are available to 100% of the city's population.	• NDMC Ranks 16 in Swacch Bharat Ranking of 476 Cities (Survey by MoUD, August 2015)	NA	• Redesigned public toilets are envisaged in key nodes
23	**Waste Management** - A Smart City has a Waste Management System that removes household and commercial garbage, and disposes of it in an environmentally and economically sound manner. (Guidelines 2.4.3 & 6.2)	**Scenario 3** Waste is segregated, collected, recycled and disposed in an environmentally sound manner.	• Residential door-to-door MSW collection improved to 100% in 2015 from 60% in 2012 • Commissioned 100% mechanisation of MSW collection & transportation in 2015 (16 compactors, 28 auto-tippers & 12 open tipper trucks GPS) on PPP mode • MSW treated at waste to energy and compost pits	The city reduces land fill caused by waste so that it is minimal. All the solid waste generated is segregated at source and sent for recycling. Organic waste is sent for composting to be used for gardening in the city. Energy creation though waste is considered.	• Grass to Gas technology to be introduced to minimize landfill waste and generate green energy and to reduce leaf burning that deteriorates the air quality • Extending door to door municipal waste management for commercial and institutional areas, inter-alia including geo-tagging of bins
24	**Safety and Security** - A Smart City has high levels of public safety, especially focused on women, children and the elderly; men and women of all ages feel	**Scenario 2** The city has medium levels of public safety - some more vulnerable groups feel insecure during some	• NDMC area has been made 'Dark Spot Free' during 2012-15	The city has very high levels of public safety - all residents feel safe in all parts of the city during all hours of the day.	• Appropriate solutions envisaged with the collaboration of Delhi Police and other stakeholders responsible for safety and security,

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safe on the streets at all hours. (Guidelines 6.2)	points of the day and in some parts of the city.	• 310 CCTV surveillance cameras installed at all major markets including CP & Khan Mkt. • 700 CCTV surveillance cameras installed at 72 colonies in 2015		that integrates with the hierarchical Command and Control system • Enhanced ability of law enforcement to detect and apprehend criminals and improve road safety

Scenario Colour Codes	Scenario 1	Scenario 2	Scenario 3	Scenario 4