

**PROGRAMME DEVELOPMENT BRANCH, GLOBAL SOLUTIONS DIVISION**  
**TERMS OF REFERENCE**  
**JUNIOR PROFESSIONAL OFFICER (JPO)**

**Position:** Junior Professional Officer (Digital Rights and Inclusion)  
**Branch:** Programme Development Branch  
**Location:** UN-Habitat Headquarters, Nairobi, Kenya

**BACKGROUND AND JUSTIFICATION**

Urbanization is one of the global megatrends of our time, unstoppable and irreversible. In 30 years from now, two-thirds of the world's population is likely to live in urban areas. Ninety per cent of urban growth will occur in less developed regions, such as East Asia, South Asia and sub-Saharan Africa, at a rapid pace and in situations in which capacity and resources are most constrained and development challenges most intense. Urbanization in those parts of the world is largely unplanned, fueling the continuous growth of informal or slum settlements. Although the world has made significant progress in reducing poverty since 2000, inequality is rising in the cities of both the developing and developed world.

In addition to the urbanization challenge, the world faces a climate crisis as up to 70 percent of global carbon emissions come from urban areas. At the same time, the world is becoming increasingly digital. Data, artificial intelligence, connectivity and the new digital economy are shaping the future of our societies. In this regard, digital technologies have the potential to serve people, improve public services and working conditions. But persistent digital divides remain, and the digital revolution must be directed and governed in a democratic and inclusive way.

Half the world's population is connected to the internet and it is progressively clear that digital technologies have the potential to unlock sustainable urban development. Today, more than 50 percent of the world's population is connected to the internet. Among the world's 47 least developed countries, more than 80 per cent of the population is still offline. Moreover, the gender gap in connectivity continues to widen. Worldwide, some 327 million fewer women than men have a smartphone and can access the mobile internet. Women are also drastically under-represented in scientific education, information and communications technology jobs, and tech-related academic careers. Connecting all the world's people by 2030 should be a shared priority, not only for sustainable development, but for gender equality.

In recent years, the idea of the 'smart city' has emerged as an approach in which digital technologies can be harnessed to improve urban efficiency, quality of life and sustainability. The *New Urban Agenda* calls for the adoption of a "smart city approach that makes use of digitalization, clean energy and technologies".

Unfortunately, in many smart city and urban innovation projects, technology has been applied uncritically, based on supply rather than demand, and often fail to fully consider the real needs of local governments, the people that live in the cities or the broader aims of urban sustainability and

inclusion. At the same time, many local governments lack the capacity and knowledge to identify and procure appropriate technologies that meet their needs. The smart cities field, particularly in projects in developing countries and emerging economies, seems stuck in a semi-permanent pilot project mode, where few innovations scale or effectively engage and benefit the most poor and vulnerable. It has become even more apparent during the current Covid-19 pandemic induced crisis that digital technologies are fundamental to access services such as health and education. All levels of government, especially local governments, are in urgent need to bridge the digital divide and handle the digital transformation.

**a. Digital transformation and inclusive, resilient, safe and sustainable urban development**

The digital transformation, accelerated by the Covid-19 pandemic, has impacted all communities, particularly in urban areas (and specifically in low income settlements). In recent years, the UN system increasingly has focused on this topic. Several global agendas linking urbanization and technological change, including the 2018 High-level Political Forum on Sustainable Development (HLPF) in which the Ministerial Declaration adopted called for Member States to ‘embrace innovation-driven development, digitalization and new technologies, especially information and communication technologies, in managing cities more effectively and holistically’.

While 50 per cent of the world has access to the internet, the other half does not, leaving 3.6 billion people without access. The World Bank 2016 World Development Report focusing on “Digital Dividends” contrasts the benefits of digitalization against a grossly uneven playing field, which can be spatially mapped alongside other elements of exclusion related to poverty in particular. Only about 15 percent of the world can afford access to broadband internet whilst nearly 2 billion people continue to live without owning a mobile phone (and even less, smart phones). The digital divide within countries can be almost as high as that between countries. Worldwide, around 21 per cent of households in the bottom 40 per cent of their countries’ income distribution do not have access to a mobile phone and 71 per cent do not have access to the internet at all. Women are less likely than men to use digital technologies and groups already at risk of marginalization are particularly negatively impacted, for example older people and people with disabilities and in particular those intellectually challenged and visually impaired.

As technological change has accelerated, the mechanisms for cooperation and governance of this landscape have failed to keep pace. Recognizing this, the UN Secretary General, Antonio Guterres has prioritized dealing with the consequences of new technologies. In July 2018, he appointed a High-Level Panel on Digital Coordination to investigate collaborative pathways to address the social, ethical, legal and economic impact of digital technologies in order to maximize their benefits and minimize their harm while contributing to the achieving the Sustainable Development Goals. In this regard, advancing technology has been coupled with significant impacts on the environment as well as climate change mitigation and adaptation. The Panel made 11 recommendations on how improve global digital cooperation, divided into five areas:

- i. An inclusive digital economy and society;

- ii. Human and institutional capacity;
- iii. Human rights and human agency;
- iv. Trust, security and stability; and
- v. Global Digital Cooperation.

It is in this context that the Panel recommends the achievement of the following targets by 2030: (1) every adult should have access to digital networks; (2) special attention is to be placed on digital inclusion of women<sup>1</sup> and marginalized groups<sup>2</sup>; (3) artificial intelligence should be subject to ethical standards; (4) Global Commitment on Digital Trust and Security to be developed in order to strengthen the norms for responsible use of technology; (5) Advisory Body on Artificial Intelligence (AI) established; and (6) commitment to produce *System-wide Guidance on Digital Human Rights*.

The *UN Strategy on Sustainable Urban Development* highlights digital transformation and new technologies as one of four frontier issues that require a special, coordinated response. The *New Urban Agenda* calls for technology and communication networks to be strengthened and for smart-city approaches that use digitalization, clean energy, and technologies to boost economic growth and improve service delivery, while promoting broad-based inclusion, including of persons with disabilities.

We have a collective responsibility to give direction to new technologies so that we maximize benefits and prevent unintended consequences. For instance, Artificial Intelligence and data can be used for the public good but can also be used to monitor and manipulate behavior, to manipulate voters, to track human rights defenders (and offenders) and to stifle expressions of dissent.

In the absence of public oversight and accountability, data on individuals and communities is being extensively recorded, often by private companies, raising concerns around privacy, surveillance, data sovereignty and individual autonomy. We need to ensure that human rights obligations apply online as they do offline. That's why the Office of the High Commissioner on Human Rights is working on understanding exactly how international human rights can be applied in cyberspace.

#### **b. UN-Habitat's mandate in the field of digital transformation**

##### UN-Habitat Strategic Plan 2020 – 2023

UN-Habitat's *Strategic Plan 2020 – 2023* reinforces UN-Habitat's position as the global centre of excellence on sustainable urban development, offering solutions that help seize the opportunities presented by urbanisation, while bringing about transformational change for the benefit of millions of people, ensuring that no one and no place is left behind.

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<sup>1</sup> Intersectionality – refers to the multiple layers of exclusion for women and girls e.g. those living with physical and mental disabilities, indigenous communities, migrants and refugees etc *creating overlapping and interdependent systems of discrimination or disadvantage* ([www.lexico.com/en](http://www.lexico.com/en)).

<sup>2</sup> Note that Social inclusion in the UN-Habitat context considers issues related to human rights, gender, youth, children, older persons and people with disabilities

The Strategic Plan lays out a recalibrated vision and mission, and a sharpened focus. UN-Habitat proposes to serve Member States, sub-national and local governments, and other key urban actors in the pursuit of four mutually reinforcing and integrated domains of change:

- i. Reduced poverty and spatial inequality in urban and rural communities;
- ii. Enhanced shared prosperity of cities and regions;
- iii. Strengthened climate action and improved urban environment; and
- iv. Effective urban crisis prevention and response.

*Outcome 2.3* of the Strategic Plan is “expanded deployment of frontier technologies and innovations for urban development”. Frontier technologies are influencing the emergence of smart cities, how we build and manage our cities and human settlements, and how urban managers take more informed decisions.

The implementation of the Strategic Plan 2020 - 2030 is also supported by six “organizational performance enablers”: (1) monitoring and knowledge; (2) innovation; (3) advocacy, communication and outreach; (4) partnerships; (5) capacity building; and (6) systems and processes. UN-Habitat needs to put in place the adequate institutional, managerial and financial conditions. Moreover, “drivers of change” for achieving sustainable urbanization have been outlined: (1) policy and legislation; (2) urban planning and design; (3) governance; and (4) finance mechanisms.

#### Flagship Programme on People Centered Smart Cities

Following the adoption of the Strategic Plan 2020 - 2030, UN-Habitat is developing five global flagship programmes to support its implementation. The ***Flagship Programme 2*** focuses on ***People-centered Smart Cities*** to act as an umbrella and enabler for mainstreaming the approach across all its work. This function will have a clear mandate to support colleagues and our implementing partners in the delivery of their operational and normative work. The function will be supported by committed and mandated smart city focal points with dedicated resources and time in other offices.

The objective of this flagship is to ensure that the smart cities field is focused on ensuring sustainable development outcomes aligned with human rights, social inclusion including ensuring that no one and no space is left behind, and that cities reduce carbon emissions. Together with the other complementary flagship programmes and in collaboration with other UN Agencies, as well as state and non-state actors, this flagship is expected to achieve the following outcomes:

- i. **DIGITAL POLICY TRANSFORMATION:** Increased focus and mainstreaming of people-focused, sustainable and inclusive digital transition as a critical policy topic in high level political forums and global dialogues on smart cities.
- ii. **FINANCING DIGITAL URBAN INNOVATION:** Increased investment and financing for people-focused smart cities to accelerate the achievement of the SDGs with a specific focus on developing countries, small and medium size cities and access for grassroots urban communities

- iii. **DIGITAL EMPOWERMENT & CAPACITY BUILDING:** Enhanced capacity of governments at all levels to adopt a people-focused, privacy-enhancing, and rights-preserving approach to digital technologies for social inclusion and sustainable urban development in the achievement of the SDGs.

## **DUTIES, RESPONSIBILITIES AND EXPECTED OUTPUT**

The JPO will assist with the development of the following outputs contributing to shaping UN-Habitat's engagement in the "smart cities" arena, particularly Flagship Programme 2 on People-centred Smart Cities, including outlining both normative and operational activities:

1. *Support preparation of UN-Habitat approach to people-centred smart cities:* identify challenges, opportunities, best practices, lessons learned from in the field of digital rights, digital transformation and inclusive urbanization; provide evidence for strategic advice and support coordination on UN-Habitat's engagement in the smart cities arena, hereby strengthen the flagship programmes, particularly on people-centered smart cities, the agency's human rights and social inclusion agenda by introducing the right reference framework regarding smart cities, rethinking framework conditions and definition in light of current digitalization and urbanization approaches, and in line with UN targets to ensure "sustainable development outcomes aligned with human rights, including ensuring that no one and no space is left behind, and that cities reduce carbon emissions". This will include how to establish an inclusive smart cities reference group and a local government 'chief innovation officer' forum.
2. Support the preparation and implementation of *UN-Habitat's Digital Transformation and Urbanization Strategy*, ensure horizontal collaboration within the agency to ensure integration of the work and needs from the Global Solutions Division (Programme Development Branch and Urban Practices Branch) as well the External Relations, Knowledge, Strategy and Innovation Division (Knowledge and Innovation Branch) and regional and country offices. This includes support to coordination of *UN-Habitat's policy brief on positioning the agency within the UN Development System in light of UN-Systemwide Strategy on Sustainable Urbanization as well as the UN Secretary General's Strategy on New Technologies*, including preparation of Guidance notes for UN-Habitat's contribution to relevant coordination/ reference groups at global, regional and country level. Special consideration should be given to include marginalized groups such as older persons, people living with disabilities and other minority groups who have had less access or been previously been excluded,
3. *Support to partnerships and resource mobilization:* Identify existing and potential partnership as well as resource mobilization opportunities related to the people-centred smart cities field, the related flagship programme in addition to mainstreaming the smart cities discourse into other sectors of engagement, i.e. environmental and climate arena; identify potential donors and partners, including relevant member states, policy networks, foundations, investors, private sector entities and tech industry players; map relevant



actors, their interests and current activities and provide advice on the best strategy to engage them. Provide support to existing partnerships and networks, including with other UN agencies, the private sector and the Cities for Digital Rights Coalition.

4. Support conceptualization for preparation of *Global Guidelines on People-Centered Smart Cities*, in close collaboration with Member States in addition to support to conceptualization of programmes and projects for localization.
5. Support elaboration of *UN-Habitat Capacity Development Programme* on mainstreaming People-Centred Smart Cities into normative and operational work. Hereby, support the process of transforming key normative tools into capacity building packages, link to UN-Habitat's capacity development and knowledge management systems.

## **TRAVEL**

Occasional Travel to key conferences and in relation to on-going projects will be required once the UN COVID travel restrictions are gradually eased.

## **TRAINING AND LEARNING ELEMENTS**

The incumbent will be encouraged and supported to engage in general training and learning activities both at the UN campus in Nairobi, at external training events and through electronic courses. The Human Resources Management Service of the United Nations Office at Nairobi offers a wide range of cross-cultural training workshops or language classes.

The knowledge around the scope and opportunities offered by digital technologies in the development work is rapidly evolving. The incumbent will contribute to and participate in trainings, workshops and conferences organized by or participated in by UN-Habitat exposing her/him to the cutting-edge knowledge and will give her/him the opportunity to develop a much-needed cutting-edge set of skills. The incumbent will also undertake the mandatory UN training required of all UN personnel including 'I know Gender'.

## **QUALIFICATIONS, EXPERIENCE AND COMPETENCIES REQUIRED**

### **Education**

An advanced university degree (master's degree or equivalent) in information and communications technology, applied computer and information science, economics, urban and regional development studies, social sciences, human rights or any related discipline, or a first degree with the relevant combination of professional and academic qualifications.

### **Work Experience**

The JPO is required to have at least 2 years of professional experience in information and communications technology, applied computer and information science, economics, urban and

regional development studies, social sciences, human rights or any related discipline. Demonstrated ability to take initiative and work independently with limited supervision. Experience in managing and applying key issues of digital transformation to urbanisation processes; Experience and knowledge of the UN system is an advantage.

### **Languages**

English and French are the working languages of the United Nations Secretariat. For the post advertised, excellent fluency in oral and written English is essential. Knowledge of another UN official languages would be an advantage.

### **Competencies**

**Professionalism:** Shows pride in work and in achievements; is conscientious and efficient in meeting commitments, observing deadlines and achieving results; shows persistence when faced with difficult problems or challenges and remains calm in stressful situations.

**Communication:** Speaks and writes clearly and effectively; listens to others, correctly interprets messages from others and responds appropriately; asks questions to clarify, and exhibits interest in having two-way communication; tailors language, tone, style and format to match the audience; demonstrates openness in sharing information and keeping people informed.

**Teamwork:** Works collaboratively with colleagues to achieve organizational goals; solicits input by genuinely valuing others' ideas and expertise; is willing to learn from others; places team agenda before personal agenda; supports and acts in accordance with final group decision, even when such decisions may not entirely reflect own position; shares credit for team accomplishments and accepts joint responsibility for team shortcomings.

**Technological Awareness** Keeps abreast of available technology; understands applicability and limitation of technology to the work of the office; actively seeks to apply technology to appropriate tasks; shows willingness to learn new technology.

### **SUPERVISION**

The JPO will work under the supervision of the responsible Programme Management Officer leading on the Flagship Programme 2 on "People Centred Smart Cities" at the Programme Development Branch. The JPO will have an additional line of reporting to the head of the Human Rights and Social Inclusion Unit, both located at UN-Habitat's Global Solutions Division.