

Safeguards and Rights in the Digital Age: Reflections from Nairobi on Modernizing Population Registers

By Janaina Costa, Fellow, IUSSP Scientific Panel on Population Registers, Ethics and Human Rights

Modernizing population registers is no longer just a technical or statistical process - it has become a profound ethical and human rights challenge. As governments digitize civil registration, identity management, and data systems, the need for shared standards, safeguards, and interdisciplinary dialogue is more urgent than ever.

These were discussions at the center of two major international events I participated in this October in Nairobi, as a fellow at the **IUSSP Scientific Panel on Population Registers, Ethics and Human Rights**.

The first event, the **Expert Group Meeting on Population Registers: Consolidating Lessons from the Field and Synthesizing International Technical Standards on Population Registers and Their Usability** (13-14 October), was co-organised by several members of the newly established [Community of Practice on Population Registers](#), co-chaired by the National Institute of Statistics, Uruguay (INE), Statistics Norway and the United Nations Population Fund (UNFPA) in collaboration with [the International Union for the Scientific Study of Population \(IUSSP\) and its scientific panel on population registers, ethics and human rights](#) and the International Development Research Centre (IDRC).

This meeting brought together government experts from National Statistics Offices and related line ministries alongside technical advisors and researchers from international and regional organizations, as well as academic institutes to reflect on the new realities of digitalization to further develop technical standards and benchmarks for assessing the completeness, quality and usability of population registers.

The second, the [4th Global CRVS and Gender Symposium](#) (15-17 October), co-hosted by the Government of Kenya, UNFPA, IDRC, UNICEF, UNECA, and Open Data Watch, focused on how **Civil Registration and Vital Statistics (CRVS)** systems can drive gender equality and societal inclusion. Its [Background Paper, Making Everyone Count: Advancing Gender Equality and Women's Empowerment through Inclusive CRVS Systems](#), situated CRVS strengthening as a human rights imperative to the Sustainable Development Goals.

Across both events, I contributed under a theme that speaks directly to my work but also to the mission of our Panel: ensuring that technological modernization does not outpace Human Rights and ethical reflection.

From Systems to Safeguards

At the Expert Group Meeting, I spoke in the session named 'Technical Standards on Inclusive Population Registers – Where Are We? What Do We Need? What Next?', presenting *From Systems to Safeguards: Integrating CRVS, ID, and Digital Public Infrastructure*.

My intervention examined how the next generation of digital transformation, anchored in **Digital Public Infrastructure (DPI)**, is reshaping the ways governments build and govern CRVS and legal identity systems. DPI refers to interoperable digital layers such as **digital identity, payments, and data exchange**, which form the backbone of digital governance and service delivery.

When properly aligned with CRVS and identity management systems, DPI can strengthen inclusion, efficiency, and transparency. But if not safeguarded, it can also deepen inequalities or erode public trust.

Drawing on the [**UN DPI Safeguards Framework**](#), I emphasized that safeguards must be treated as continuous governance mechanisms built into every stage of system design, implementation, and evaluation. As I stated during the presentation:

“Roads need guardrails — and DPI needs safeguards.”

Asking the Right Questions

When I was invited to speak at both events, I was given four guiding questions to frame my interventions. Instead of answering them, recognizing their complexity and reach beyond any single expertise, I chose to present them back to participants as an invitation for shared reflection across disciplines and sectors.

1. **Are we moving in the right direction?** Are current DPI safeguards necessary and sufficient?
2. **What else do we need** to ensure safe and inclusive governance around CRVS, identity management, DPI, and digital public goods (DPGs)?
3. **How do we ensure civil society and community partners help shape this ecosystem?**
4. **What are the gender and inclusion issues at stake** with CRVS, ID, and DPI design and implementation?

These questions do not yield easy answers. Instead, they remind us that digital transformation requires continuous ethical vigilance - not only technical progress.

Facilitating the World Café on Digital Public Infrastructure

At the **4th Global CRVS and Gender Symposium**, I also facilitated the World Café Table on Digital Public Infrastructure, held under the theme *Population registers, digital public infrastructure, and digital public goods: strategic alignment, systems coherence, and data interoperability*. This session formed part of the broader **World Café and Panel Discussion: Accelerating Progress Towards Gender-Transformative Systems for Societal Inclusion Across the Life Course**.

Participants included representatives from governments, development organizations, and academia. The conversation centered on the practical, ethical, and institutional dimensions of linking CRVS, population registers, and DPI.

The discussion followed six key thematic strands:

1. **Strategic priorities for DPI**, including digitization of legacy CRVS systems and strengthening administrative capacity.
2. **Foundations for rights-based and inclusive systems**, reaffirming that rights must precede digital expansion (“don’t build the house by the roof”).
3. **Systems coherence and interoperability**, stressing alignment between CRVS, population registers, and DPI.
4. **Governance, data protection, and public trust**, emphasizing that expanding data systems heightens the need for ethical safeguards.
5. **Inclusion, accessibility, and gender-transformative design**, calling attention to user experience, mobility, and barriers faced by women and marginalized groups.
6. **Ethical and sustainability considerations**, highlighting data sovereignty, sustainability assessments, and human rights impact reviews.

The discussion made clear that public trust is both a foundation and a goal of inclusive digital transformation. Technical success without ethical legitimacy risks undermining the very purpose of these systems.

Looking Ahead

Both the **Expert Group Meeting** and the **Global CRVS and Gender Symposium** demonstrated that the modernization of CRVS, population registers, and identity management systems is not just a matter of digital innovation - it is about how societies balance digitization with human rights, ethics, and inclusion. The convergence of CRVS, ID systems, and DPI represents an opportunity to ensure that every person is visible and protected, but only if these systems are designed with safeguards and gender-transformative principles at their core.

As a Fellow of the IUSSP Scientific Panel on Population Registers, Ethics and Human Rights, I see this work as part of a broader effort to build an interdisciplinary bridge that links demography, law, ethics, and data science to guide governments and partners through this transition. Our goal is simple yet urgent: to ensure that as we modernize systems that *count* people, we also design systems that *protect* them.