



**Fifth Conference of African Ministers Responsible  
for Civil Registration**  
Lusaka, Zambia  
14-18 October 2019

CRMC5/2019/21

## Modernization of the civil registration and vital statistics system through ICIVIL innovation in Burkina Faso

*Conference Theme: Innovative Civil Registration and Vital Statistics System: Foundation for Legal Identity Management*



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Decade for Repositioning  
of Civil Registration and  
Vital Statistics in Africa  
**2017-2026**



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## I. Introduction

1. According to the United Nations Children’s Fund, birth registration rates in sub-Saharan Africa are below 50 per cent. In the poorest households, they are less than 30 per cent. Even today, 95 million children under the age of 5 years are without legal status in Africa, according to the same source. The World Health Organization notes that two out of three deaths are never recorded, which means that they are not included in vital statistics systems. It reveals incomplete civil registers where millions of children and adults are not recorded. This deprives them of their fundamental rights such as legal recognition and access to basic social services such as education and health. As a result, States do not have reliable and complete data for public policy planning. This failure to identify some of its citizens effectively leads to their exclusion and could cause government development programmes to continue to fail, resulting in serious legal uncertainty, inequality of citizens before the law and political and social instability.

2. In Burkina Faso, according to a World Bank study,<sup>1</sup> in the absence of a birth certificate, more than 6 million Burkinabe are unable to produce proof of their identity. In 2017, only 49.4 per cent of births in public and private health facilities were registered within the legal time limit of two months and only 34.25 per cent of deaths were registered.<sup>2</sup>

3. Overall, vital statistics are not sufficiently collected from registers and are therefore poorly documented.

## II. The necessity for Burkina Faso to have a national digital civil status register

4. Despite the formulation in 2012 of a national civil registration strategy to increase the supply and demand for civil registration services, Burkina Faso is still lagging behind international civil registration and vital statistics standards. Indeed, the system includes the following shortcomings:

- Geographical inaccessibility of civil registration centres during the winter period, particularly for people living in rural areas.
- A lack of knowledge of the legal deadlines for birth registration and other civil status events, particularly owing to parental illiteracy.
- A lack of knowledge about birth registration and other civil status procedures.
- A shortage of registers and civil status forms.
- Difficulty in archiving physical registers and other civil status documents in storage buildings.
- An inability to build an exhaustive, dynamic and centralized civil status register.

5. These difficulties are particularly acute in rural, already poor areas where more than 80 per cent of the population lives.

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<sup>1</sup> See <http://pubdocs.worldbank.org/en/653431522763079651/Burkina-Faso-ID4D-WebFinal040318.pdf>.

<sup>2</sup> Report on the implementation of the 2017 action plan of the revised national civil registration strategy, Ministry of Territorial Administration and Decentralization of Burkina Faso.

6. The Government of Burkina Faso therefore sees the use of new information and communications technologies, including mobile technology, as a fast, secure and less costly way to achieve a reliable and secure civil status covering the national territory.

7. Burkina Faso showed its interest in ICIVIL as a technological solution after a successful experiment at Ouagadougou City Hall. This innovation ingeniously simplifies the process of registering civil status and producing life statistics and, thanks to the unique identification code offered to each citizen, which links them physically to other identification ecosystems.

8. The trial carried out in Burkina Faso demonstrated the potential of ICIVIL to solve problems related to the need for civil registration and vital statistics. The pilot started in 2015 with 10 pilot maternity hospitals but only one maternity hospital has been maintained by the demonstrator since 2016.

9. The ICIVIL pilot immediately registered more than 3,000 births and found, among other things, that 100 per cent of births registered through the system resulted in effective registration. This led to the granting of birth certificates to 100 per cent of the identified children. This contrasts with the traditional system, which offered only a low effective registration rate of 49.40 per cent in 2017.<sup>3</sup>

10. The pilot demonstrated the ability of ICIVIL to address the challenges of monitoring vital statistics indicators with real-time availability, data accuracy and 100 per cent reliability, thus facilitating operational decision-making.

11. ICIVIL allows the State to integrate persons not registered in the civil register, people can access their civil status documents in any civil status centre and the system automatically manages references in the margins of the registers. The recurrent costs of the system are also more economical than the traditional (manual) system used to date. The planned national scale-up system will enable Burkina Faso to have a comprehensive, dynamic, centralized and complete digital civil registry hosted on the territory.

### **III. Description of the ICIVIL technological solution designed for civil status management**

12. ICIVIL is a technological solution that aims to build a centralized digital civil registry through the use of new technologies. From the digital birth of a person to his or her digital death, all civil status facts (birth, marriage, divorce and death) are traced.

13. This integrated solution for the registration of births and other civil status events is based on a mobile application. It is a packaged solution to subsequently enable the declaration, registration and issuance of birth certificates as well as other civil status documents. It is based on “bubble bracelets” for the digital identification/authentication of newborns, guaranteeing the inviolability of digital identification throughout life and encrypted Short Message Service (SMS) to transmit information quickly, taking into account the poor connectivity and mobility realities.

14. As a practical measure, a unique and impossible to copy “bubble tag” is integrated into the bracelet. The midwife (or other duly authorized person) scans the bracelet with the smartphone provided. A form is automatically generated for completion (including such information as the child’s gender and name and the parents’ biography). The data are then sent by encrypted SMS to the server of the national civil registry centre, which checks that the bracelet is valid and has not been used before.

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<sup>3</sup> Ibid.

This is followed by registration by a civil registrar, when the bubble bracelet is presented with the necessary additional information. A birth certificate can then be issued upon presentation of the bracelet on the same day, or later, in any civil registration centre in the country.

15. The pilot is currently under way in three cities across the country and contrasts with the traditional paper-based system that offers only a low registration rate.

#### **IV. Interoperability with related ecosystems**

16. In addition to establishing a dynamic and comprehensive national civil registry, ICIVIL will enable Burkina Faso to build the foundation essential for the success of related ecosystems. It will provide useful data, at no extra cost, for the creation of:

- A file of national identity cards and passports.
- A voting register.
- A public health file (for the monitoring of child vaccinations).
- A justice file (containing criminal records and certificates of nationality).
- A population file (with national statistics for example on education and employment).
- A business register.

#### **V. Deployment planning, skills transfer and financing**

17. Overall, the scaling-up of ICIVIL across Burkina Faso includes the provision of the following:

- Two physical servers for civil status data storage on national territory.
- Workstations in the 1,250 civil registration centres (nationwide and in embassies and consulates).
- Workstations for the 25 regional courts.
- Smartphones for vital facts declarations (births and deaths) in the 2,769 health centres.
- Bubble tag bracelets (for 800,000 newborns expected per year).
- Training for technical staff, health workers and officers at civil registrars.

#### **VI. Autonomous administration of civil status data and financing**

18. ICIVIL is a physical system to be integrated into the institutional system of civil status. Data management will be entirely ensured by Burkina Faso through the authorized structures.

19. The Government's project for ICIVIL has already received support from such international partners as the United Nations Population Fund, the International Organisation of La Francophonie, the Global Financing Facility and the Office of the United Nations High Commissioner for Refugees.

## **VII. Questions for discussion**

### **Challenges related to the use of information and communications technology in the civil registration and vital statistics system**

1. Is the coverage of communication networks enough or does it need to be strengthened for the deployment of ICIVIL?
2. Do health and civil registration centres have access to an energy source for the operation of their ICIVIL equipment?
3. How does ICIVIL offer interoperability with other related identification systems?
4. Are the data produced by ICIVIL hosted in Burkina Faso?

## **VIII. The Sustainability of the use of information and communications technology in the civil registration and vital statistics system**

1. Are the recurring costs of ICIVIL accessible?
  2. How can skills be transferred to users and other actors of the ICIVIL system?
  3. Is ICIVIL duplicable in other African countries?
  4. In how many languages is ICIVIL available currently?
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