



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

CRMC5/2019/20

Electronic birth and death registration system in Egypt

Conference theme

*Innovative Civil Registration and Vital Statistics systems:
Foundation for Legal Identity Management*



APAI-CRVS
Everyone visible in Africa

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

I. Background

1. The automation of birth and death registration, including cause-of-death data, has significant importance in supporting strategic planning, policymaking and decision-making by providing real-time information.
2. In view of the Government's orientations in the field of administrative reform, public services automation and the Sustainable Development Strategy: Egypt Vision 2030, priority has been given to automate the registration of births and deaths while building a real-time dynamic database so that such information can be provided to a multitude of other government services.
3. In 2017, the Ministry of Planning, Monitoring and Administrative Reform, in collaboration with the Ministry of Health, developed and implemented the electronic Egyptian Birth and Death Registration System (EBDRS) to automate 4,571 health offices, 300 health departments and 27 health directorates and link them to a central database. This automation enabled the effective use of technology, not only to make timely vital statistics available, but also to provide instant public services by linking together Egyptian governmental entities. The interoperability between respective public sectors in an efficient, secure and confidential platform also facilitated the provision of services of other public sectors including identity management and universal health insurance.

II. Electronic birth and death registration system

4. EBDRS is a pioneer project in which innovative ideas are implemented for the development of a well-functioning birth and death electronic registration system. It aims to provide accurate and instantaneous data and indicators on births and causes-of-death for decision makers and stakeholders at all levels.
5. The EBDRS project aims to replace the paper-based system of registration of births and deaths with a digitized registration system and to create a central database for births, deaths and causes-of-deaths. As EBDRS followed the same legal framework as stipulated in the Egyptian Civil Registration Act, no changes in the law were required.
6. However, the application of this electronic system greatly reduced incomplete entries as well as data entry mistakes, through a series of data entry validations. Citizens, residents and refugees receive a printed birth or death registration certificate directly from the Ministry of Health, once data entry is completed. The Ministry of Health then electronically notifies the civil registration authority of the new vital events that have taken place in the health sector as a whole, whether in private or public sector facilities.
7. For continuous online operation, EBDRS used the mobile network GPRS/3G (APN secured tunnel) technology to overcome the lack of landline availability and to create a private secured governmental data transmission network to link 4,571 health offices with 300 departments and 27 directorates; all of them connected with the Ministry of Health. Moreover, capacity-building activities of more than 10,000 employees (data entry, doctors and supervisors) were conducted.
8. The process of registration, including the incorporation of data in the Ministry of Health system, is completed within 15 minutes compared with one month in the paper-based system.

9. Vital statistics, once available, can be used to ensure complete vaccination coverage, calculate total population and inform planning and decision-making in other government sectors, such as social security. A live “population clock” situated in the Central Agency for Public Mobilization and Statistics is instantaneously updated by every birth and death. System dashboards process and analyse data and indicators and display graphical and geographical representations of the distribution of births, deaths and causes-of-deaths by village, district and governorate, as well as by age and sex. Using cause-of-death, a health map of Egypt is available on a timely basis. Currently, 39 statistics reports and 21 health indicators are calculated routinely.

10. EBDRS utilizes the International Classification of Diseases version 10 (ICD-10) to code, classify, record and analyse causes-of-deaths. Reports are consequently prepared using ICD-10.

11. EBDRS facilitated the registration of a total of 6,082 newborn refugees in 2017, thereby granting them instant access to services such as vaccinations and refugee subsidies.

III. Presentation

12. A presentation will be delivered by a representative of the Ministry of Planning, Monitoring and Administrative Reform.

IV. Discussion points

(a) How does automating the process and workflow of birth and death registration and recording causes-of-death minimize incomplete data and make vital event information available to all government service providers on a timely basis?

(b) Does the timely availability of health maps include demographic, mortality and cause-of-death indicators for resource allocation and strategic health planning purposes?

(c) How would information and communications technology (ICT) solutions resolve the lack of ICT infrastructure in villages and remote areas?

(d) Given that civil registration and vital statistics systems are multisectoral, what does it take to unify the registration workflow across all registration offices?

(e) As changes do not take place easily, how did the Ministry of Health deal with resistance from the Government and the public during the move from paper-based to automated registration?

(f) Are there any future developments planned or being developed to enhance EBDRS?
