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Implemented by

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Executive Summary

Digital Pandemic Preparedness Assessment

October 2022

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Acronyms

DPPA	:	Digital Pandemic Preparedness Assessment
EDIT	:	Early Stage Digital Health Investment Tool
ICT	:	Information and Communication Technology
M&M	:	Map and Match
MoH	:	Ministry of Health

Executive Summary

The Digital Pandemic Preparedness Assessment (DPPA) Tool aims to provide a systematic methodology to identify needs for digital tools that integrate with countries' existing digital ecosystem, while modernizing their overall pandemic preparedness, response and vaccination roll-out planning and execution. The DPPA tool takes the form of a **multi-sheet Excel workbook** which is described in detail in the DDPA Toolkit v2 file.
The DPPA tool was tested and refined in assessments which were carried out in five countries (Ivory Coast, Ghana, Nigeria, Sierra Leone, Togo) in 2021-2022. The DPPA integrates and builds on data from the USAID Map and Match project. During the development of the DPPA and Map and Match data collection tool, GIZ and Digital Square aligned on the specific use cases included in the respective tools as well as the data model for the respective assessments. The DPPA also includes use of the EDIT tool developed by the Kati collective to help assess the state of digital health readiness (in particular infrastructure and strategy).

In the **DPPA Pilot Implementation Report** the evolution of the methodology used is described, together with a summary of the experiences of each country. Also provided is a summary of the toolkit interpretation guide. Initially envisaged as a process that could be undertaken within a month, the reality was that it took each country on average about 6-7 months. Both at the start and at the conclusion of the process there were challenges in most countries. For example, getting access to the Ministry of Health (MoH) and establishing kick-off meetings took time, as did finding, training, and retaining local consultants. As the DPPA process engaged with the MoH and stakeholders it became increasingly clear that the original intention of providing specific software recommendations was going to be problematic, and that more attention than originally intended needed to be paid to understanding what the state was of the digital health ecosystem. The pilot implementation report does not provide an overall assessment of the solutions proposed, but these and much more detail is available from the country reports themselves.

The **country reports** provide in much more detail the experience of the DPPA process, the gaps identified and the recommendations. A detailed list of the digital tool opportunities are provided. Recommendations are made to support improvements in the digital health ecosystem, and concerning tools for digital pandemic preparedness. In summary, the recommendations were:

- **In Ivory Coast,** develop a long-term plan for financing the digital health system and its strategic plan for digital health (essential documents to mobilize resources from partners and the government).
- **In Ghana,** the Ministry of Health should update the current eHealth strategy in the light of pandemic preparedness and recent innovations in the digital health ecosystem. In addition, a new data warehouse is required to support collection, transformation, analysis of (pandemic-related) data and dissemination of evidence-based reports.
- **In Nigeria,** address the gaps and deficiencies identified at the ecosystem level, as well as towards improving digital pandemic preparedness. These included accelerating the release and implementation of the Nigeria Health ICT Framework (2022-2027), strengthening One Health initiatives, and developing a healthcare resource discovery tool.

- **In Sierra Leone**, strengthen mobile phone communication for contact tracing and digital tracking, improved monitoring and management of animal, environment, and human disease outbreaks (One Health).

- **In Togo,** extend the functionalities of the Health Management Information System (HMIS) in Togo to the online training of health professionals, scale the software already used by the Ministry for the management of human resources in health and acquire other software packages for the management of financial resources and the "One Health" approach.

The Learnings from the DPPA are provided in a further report. This summarises the overall approach, and the challenges during implementation. It also considers the opportunities that emerged for Ministries and Development Partners as well as learning networks.

The major lesson learned is that **digital pandemic preparedness is just one aspect of a digital health system**. The Covid-19 crisis forced attention on what should be a matter of routine – keeping current the knowledge of what digital systems and functionalities are working to improve the health system. But to institutionalise a process to do this **– to develop and improve a continuing cycle of digital health assessment requires resources that most LMICs do not have**. Or at least the resources that are available are not **co-ordinated** in such a way **that they enable LMICs to make best use of them**. Also, the reality is that **digital health strategies** are **not** kept **up to date** with **knowledge from external or internal monitoring systems** that report on the availability and functionality of the tools in use. Finally, MoHs do not have digital health **information units** established to address these issues, so assessing the digital aspects of emerging crises will remain difficult to do.

The diagram below provides a draft framework for understanding how the response to pandemics is part of a digital health systems cycle.

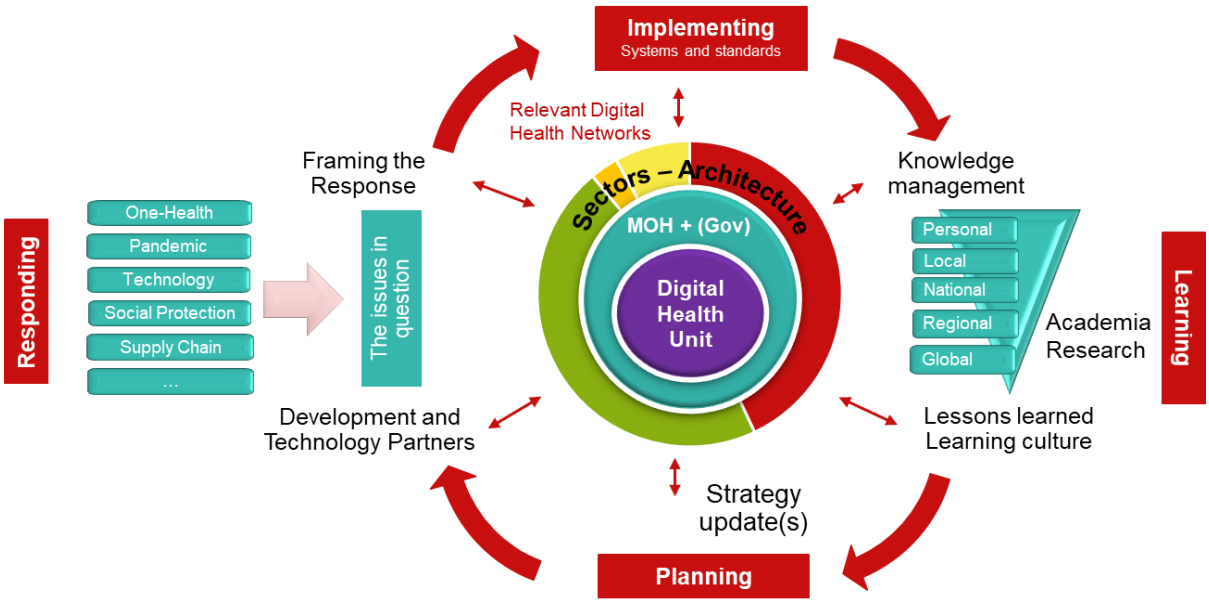

Figure 1: Draft Framework for the DHSC

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