Concept note

**Developing an Application Programming Interface (API) to connect data from the border health quarantine reporting and information software to the data warehouse**

**1. Background**

The Viet Nam Public Health Emergency Response Center (PHEOC) is established by Ministry of Health, located at the General Department of Preventive Medicine (GDPM) with the tasks of monitoring and responding to public health events. To meet the above tasks, a database which is synthesized from various data sources such as infectious disease reporting system, vaccination management system, sentinel surveillance reports, monitoring reports from the laboratory, event-based surveillance system and health quarantine information from points of entry (POEs) is needed.

With technical and financial support from the US Centers for Disease Control and Prevention (US CDC) and PATH organization, a national public health surveillance data warehouse was developed and has been operating since 2016 by GDPM with the following main results:

- Determine DHIS2 software solution as the main foundation for building a national public health surveillance data warehouse.

- The national public health surveillance data warehouse has been built based on data of the infectious disease reporting system according to Circular 54/2015/TT-BYT of the Ministry of Health. The data of 34 infectious diseases and syndromes (case report required) were synthesized and analyzed according to the basic epidemiological indicators and displayed on the disease status information tracking monitors, or dashboards, at the national EOC.

- Integrate other additional data sources into the data warehouse including: event-based surveillance (EBS), SARI sentinel surveillance system, CDZ sentinel surveillance, and support data sources for population, weather, and maps.

- Configure and decentralize system administration account for key technical staff of the General Preventive Medicine Department and 04 Institutes of Hygiene and Epidemiology/Pasteur. The administrator account has been initialized to administer the system at the EOCs of the national EOC network.

- Set up servers at the GDPM and install software (DHIS2), convert data on the server.

- The disease information dashboard is set up at: dulieudichbenh.vn.

- Annually, organize result sharing workshops and data warehouse training about many components related to data management, exploitation and analysis.

On 15th May 2014, the MOH issued Circular No.15/2014/TT-BYT guiding the provision of information and reporting in the border health quarantine system. The Circular regulates the information in the report regarding people, vehicles and goods, ashes, bones, samples, biological products transported through the borders and infectious diseases surveillances at POEs. In order to implement the circular, GDPM has developed a reporting and information software to facilitate, reduce the time for reporting and share the information between Provincial Level and National, Regional level (website at: http://baocaokdyt.com). The use of this reporting software contributes to consistency and accuracy of data from the POEs to the regional and national levels, which is a part of the Indicator-based surveillance system for infectious diseases in Viet Nam.

In order to improve the addition of necessary data sources of the national public health surveillance data warehouse to ensure the monitoring and analysis of disease situation in accordance with the functions of the PHEOC, GDPM continues to implement to connect and integrate data of the border health quarantine reporting and information software into the data warehouse system.

**2. Tentative index requirements as following:**

***- Weekly report data:***

+ Details of people: exit, entry, transit, expected cases by province

+ Details of vehicles: exit, entry, transit, decontaminated vehicles by province

***- Monthly report data:***

+ Details of people: total of exit, entry, transit, expected cases by province

+ Details of vehicles: total of exit, entry, transit, decontaminated vehicles by province

+ Details, total of goods, ashes, bones, samples, biological products transported through border gates by regional, provices.

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**3. Expected output products:**

**-** A technical document describing the development an application programming interface (API) for automatic connection of data from the border health quarantine reporting and information software to the national public health surveillance data warehouse.

- Operational API that facilitates automatic data connection and sharing between the border health quarantine reporting and information software and the national data warehouse

**4.**  **Implementation time: Nov** 2019 to Mar 2020

**5. Budget:** 4000 USD from CDC-GDPM Cooperative Agreement

GDPM will hire a IT vendor to

Ghi rõ số liệu bao nhiêu người/