

Multilateral funding mechanisms (commonly referred to as Multi-Lateral Trust Funds [MLTFs]) are becoming increasingly common instruments of nation-states and their respective foreign ministries to pool resources for financing humanitarian and development projects internationally.

¹ Under such structures, many foreign ministries provide public money into a common fund that is then utilized to fund many projects in one-to-many sector or to achieve a particular cause or goal.

With the funds received by their donors, the MLTF then awards contracts to many implementers to implement projects² (one contract per project). Implementers may be Civil Society Organizations (CSOs), Non-Governmental Organizations (NGOs), or Public Service Providers (PSPs), each of which may implement one to many projects in one to many sectors across one to many facilities in one to many locations.

As a key part of the contract, each implementer is obligated to provide the MLTF with monthly progress reports against Key Performance Indicators (KPIs); the KPIs are selected by the implementer and agreed by the MLTF. Some KPIs are common among all projects, and other KPIs are unique to a particular sector. One project will report against many KPIs, and KPIs are not unique to one project.³

This reporting requirement helps the MLTF to manage project progress, ensure that each project is progressing against time-based targets, and offer strategic guidance and assistance where & when needed. Moreover, the information provided by each implementer enables the MLTF to report to its donors on how their monies are being used, in what sectors their funds are being used, and where geographically those funds are committed and used.

Absent a streamlined reporting tool and a single source of truth, however, the MLTF's staff is often tasked with manually reporting at the program-wide level (e.g., 10,246,383 dollars are currently committed to 5 active Food Security projects in 8 locations that are serving 350,000 individuals). Designing, developing, and implementing a **MySQL-based RDBMS** into which implementers submit their reports will streamline tasks at the MLTF HQ and will also better enable members of the MLTF to provide stakeholders with expedited reports at a higher degree of accuracy (i.e., by reducing potential for mistakes made by manually reporting at the program-wide level).⁴

¹ For a non-exhaustive list of such funding mechanisms, see: The [Afghanistan Reconstruction Trust Fund](#), the [Syria Recovery Trust Fund](#), the [European Union Facility for Refugees in Turkey](#), or the [United Nations Multi-Partner Trust Fund \(UN MPTF\) Gateway](#).

² This is a simplification of the often bureaucratic processes involved with project submission, review, comments from the donor community, revision, etc; the simplification is acknowledged and is intentionally done to facilitate the development of a workable yet not onerous RMDBS.

³ In order to provide monthly reports against KPIs, each implementer must track, at a granular level, progress at each facility for each relevant indicator. A sample of such a granular report (for quantitative reporting *only*, in one Excel worksheet with multiple workbooks [one workbook may contain data for one or more indicators]) is provided as Annex 1.

⁴ Here, and also related to the above footnote, it is assumed that each implementer has its own database for tracking indicators and maintaining data; each implementer will submit, as a part of its monthly reporting obligations, an export of queries run on its database that will adhere to a structure and content agreed with the MLTF in the contract

Thus, we propose to design a **MySQL-based RDBMS** for a theoretical MLTF. MLTF staff will be the primary users, and they will be responsible for creating new projects with the relevant details (e.g., providing the project code and name, selecting and/or adding/removing sector[s] and indicators, selecting geography, and adding/removing/selecting the implementer).

Each project's implementer will have one Point of Contact (POC) who is responsible for uploading reporting data in a pre-defined structure per indicator in Excel format.⁵ Implementers will also need to submit monthly financial reports on goods purchased as well; such reports will similarly be in Excel format and will also feed into some financial-based KPIs. **Python** scripts will analyze the uploads and populate the database with the appropriate values as needed.

On the basis of uploads from implementers, MLTF staff will be able to query the database to create macro-level reports based on the sector, the geography, the implementer, or the whole of the MLTF; MLTF staff, in creating such reports, will need to provide the start and end dates of the reporting period.⁶

The general public should be able to know how their public funds are being utilized globally. Improving the abilities of MLTFs to provide reports to donor governments in a clear and streamlined fashion will enhance the ability of the public to access information about whether public funds are being used in an efficient manner to reach policy goals and objectives.

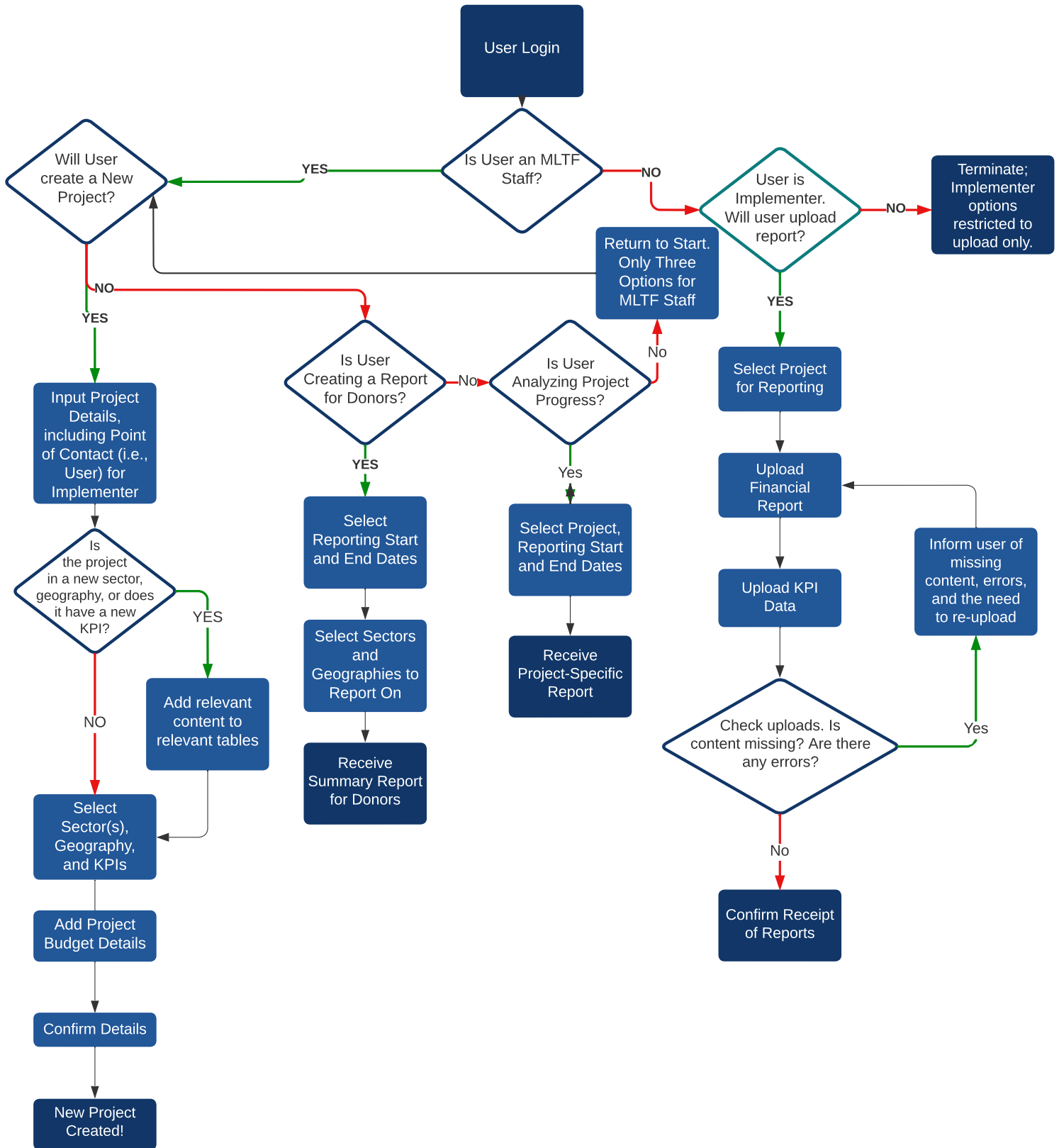
awarded for project implementation. That is, each implementer will upload an XLS or CSV that provides data corresponding to the indicators against which they must report, and the XLS or CSV will be cumulative (i.e., a new report will include only additional data that pertains to the month for which the implementer is reporting). Of note, the creation and management of a separate database for each project that is implemented by an implementer will present undue burdens for the MLTF staff; directly linking the MLTF database to each project's database may present additional opportunities for IT attacks, and so the upload method was deemed the most appropriate given all considerations.

⁵ One implementer may have many projects, and it is possible that the implementer will choose to have the same POC for all projects that they implement.

⁶ MLTF staff will, of course, also be able to review the monthly reports uploaded by the implementer.

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