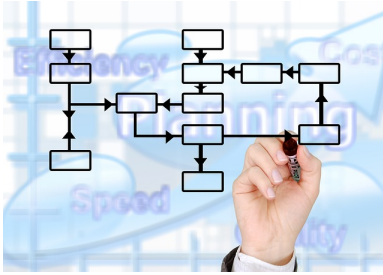


# Design data reporting architecture



The goal of this phase is to design the data reporting architecture that will be used by the data provider.

The architecture can be based on the two provisioning methods: push and/or pull. The push method consists of preparing and sending data files to the data collector, while the pull method consists of making data available dynamically that respond to queries via web service. The pull method is recommended for:

- flexibility - it allows the data collector to retrieve the specific data needed by the collector;
- timeliness - it allows the collector to get data as soon as it is made available by the provider (avoiding the extra time of the specific preparation step);
- it avoids the special preparation and sending of data packages to multiple collectors;
- the ease with which data can be updated by the provider.

However, the push method is often used in pilot phases because of the ease of testing data packages and files.

The design of the architecture must take into account several constraints such as internal network policy, IT security and performance. There are also business related constraints such as confidentiality, timeliness, and dissemination strategy.

Data may have to be gathered from several data sources and systems in order to assemble it for the SDMX data flow, and this is especially true in terms of multi-domain exchanges. Some tools, such as the SDMX Reference Infrastructure (SDMX-RI), have this multiple-connection-and-assembly functionality built in.

The architecture should reference SDMX artefacts in SDMX registries, such as the [SDMX global registry](#) in order to avoid unnecessary duplication of the artefacts and maintenance errors.

*Output of this phase:* the data reporting architecture design.