

Update series: Strategic Plan 2020-2025

**Strengthening IATI technical
infrastructure, tools and services**
September 2021



Welcome to the third in a series of factsheets from IATI's Secretariat providing IATI's members and community with updates on progress against different objectives of [IATI Strategic Plan 2020-2025 \(ES / FR\)](#).

Four factsheets have been created to outline key progress since the beginning of 2020 in implementing IATI's five year Strategic Plan:

Factsheet #1: Improving the quality of IATI data

Factsheet #2: Enabling the use of IATI data

**Factsheet #3: Strengthening IATI technical
infrastructure, tools and services**

Factsheet #4: Reinvigorating IATI's Community



Factsheet #3: Strengthening IATI technical infrastructure, tools and services

Progress on improving IATI technical estate

This update focuses on the progress towards achieving the Strategic Plan's third objective:

Strengthen the IATI Standard by consolidating its technical core and maintaining its infrastructure.

Strengthening IATI's technical estate is key to supporting the continual improvement of the quality of data and promoting its systematic use. This factsheet provides a summary of progress to date. Detailed quarterly updates on IATI's technical work have been provided by IATI's Technical Lead, Wendy Thomas, and are available on the [IATI website](#).

► IATI Technical Stocktake 2020

In 2020 the IATI Secretariat undertook a comprehensive **Stocktake** exercise to ensure IATI's technical services are fit for the future. Working with Wittij Consulting, the Stocktake involved extensive desk research, interviews with 40 IATI stakeholders and presentations of future technical proposals to IATI's community in three workshops.

The Governing Board agreed to a number of recommendations from the Stocktake, to underpin our work and transform IATI's technical services. These included:



Enabling better access to IATI data: creating a semantic data layer and delivering research to inform the development of a new version of IATI's d-portal search tool;



Ensuring organisations can publish IATI data through an IATI publishing tool;



Moving to an integrated system architecture: moving IATI tools, including the Datastore and Validator, onto a Unified Platform, and in doing so creating a single point of access for IATI's API data services.

The IATI Secretariat's Technical Team has been focusing on implementing these recommendations over the last year.

Further details about the stocktake's recommendations are [here](#).



Unified Platform and API Gateway

In September 2021, the Technical Team launched IATI's Unified Platform, as part of the Stocktake recommendation to deliver an integrated system architecture. In addition, the team has created an API (application programming interface) Gateway offering technical users a single point of access to all IATI public API services, documentation and change logs.

The API Gateway will enable us to:

- Better track and understand how our APIs are being used, via analytics and monitoring tools.
- Help identify more real-world use cases which we could better accommodate in future releases of our services.
- Enable us to protect IATI APIs from overuse and abuse.

Ahead of its launch, the Technical Team created and tested a prototype of the API Gateway on IATI's new unified platform. The team gathered feedback from IATI's community to better understand users' needs and the requirements for APIs. Learn more about the API Gateway by viewing a presentation from the [IATI Virtual Community Exchange \(April 2021\)](#).

Development of IATI Tools

Since 2020, significant technical work has been delivered to enhance IATI's range of digital tools and products.

➤ Validator

A new [Validator](#) was launched in 2020 and has proven to be a game changer for transforming the quality and usefulness of IATI data. The tool allows users to check their IATI data against the rules of the IATI Standard and receive guidance on how to make improvements. The Validator was built in collaboration with supplier Data4Development, and has since been brought in-house.

In 2021 the IATI Technical Team launched the [second version of the Validator](#) as the first application released on the new IATI Unified Platform. Whilst the user interface remains familiar to existing users, users will notice benefits in the increased speed at which IATI documents are validated, both those already published and those uploaded through the website.

The new version also introduces a public API which provides on-the-fly validation, allowing publishers for the first time to be able to integrate the Validator into their systems and validate their documents before publishing.

➤ IATI Datastore

Launched in September 2020, the new Datastore, developed in collaboration with supplier Zimmerman, allowed for more detailed queries and searches of IATI data. As agreed with the IATI Governing Board, a six-month review of the new datastore by Vitamin Software was undertaken and concluded that further optimisations were necessary; the Governing Board agreed that this work should be undertaken by the Technical Team. As with the Validator, moving this tool in-house enables the Datastore to be optimised and implemented as part of IATI's Unified Platform.



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► Semantic Data Layer

In 2021 work began to create IATI's new 'semantic data layer', an enhanced curated dataset of IATI data, which builds upon the work on existing IATI tools such as d-portal and the Country Development Finance Data tool (see Factsheet #2: Promoting the use of IATI).

We undertook a project with Ventures Consulting to learn more about the experience and needs of users who are not familiar with IATI data. This project offered findings on formats and transformations they require in order to use and trust their interpretation of the data. The findings from this project will help IATI's Secretariat to determine the requirements for updating the platform d-portal.org, with its specification and design planned towards the end of 2021 and development and delivery in 2022.

► Publishing Tool Options

In 2021 the IATI Secretariat delivered the Technical Stocktake recommendation of a full options analysis for assessing potential approaches to an [IATI publishing tool](#). The Secretariat engaged an external consultant (ThresholdWorld) to:

- Capture user requirements for an IATI-funded publishing tool
- Analyse whether requirements differ for different sized IATI publishers
- Compare these requirements to existing tools and analyse gaps
- Use this information to determine if IATI should fund a new publishing tool or continue to rely on existing external tools.

We undertook desk research, conducted one-to-one interviews with stakeholders and publishers, and surveyed all IATI publishers via email.

In March 2021 the Technical Team presented the findings of the research to the Governing Board, which decided that IATI should launch an open procurement for the provision of a free IATI publishing tool. Procurement will begin in Q3 of 2021 with a view to delivery in 2022.

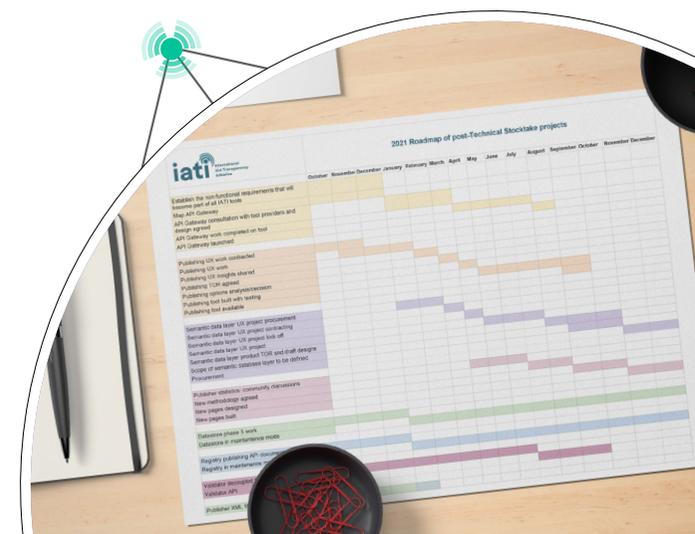
► Registry: publishing API documentation and enhancements

In March 2021, we added enhanced [Registry API documentation](#) to the IATI Standard website to help technical users integrate their tools and systems with the Registry. The improved API documentation includes:

- How to access the API
- Available API endpoints
- Detailed description of the endpoints with plenty of practical examples

The Technical Team has also implemented improvements with the supplier, fixing system timeout errors, changing user permission levels and improving the archiver to refresh the data in a timely manner. Future enhancements planned for 2021 include:

- Simplified account creation
- Simplified registration form
- Enhanced visual design to improve readability and scannability
- Improved automated email communication for new publishers upon creation of a new Registry account



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► Non-Functional Requirements

Lessons learnt from the Datastore and Validator contracts highlighted the need for the IATI Secretariat's Technical Team to develop a set of Non-functional Requirements (NFRs) which will be applicable to all in-house and external IATI tools and software going forward. These have been shared with the IATI Governing Board and are available on our website.

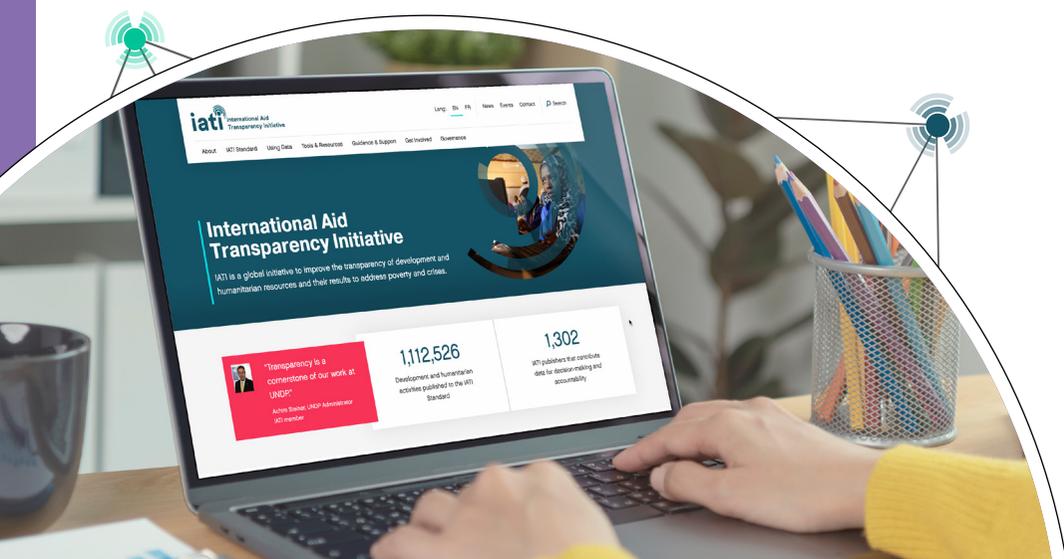
► IATI website – improving access

All information about the IATI Standard content can now be easily accessed in one place, as the Technical Team migrated it from IATI's old [Reference site](#) to iatistandard.org. In 2021, the Technical Team worked to bring the website into IATI's Unified Platform resulting in faster load times for dynamic content and quicker downloads of static files which has been a request by users based in areas of low bandwidth, for example in South America, Asia and Africa.

What's coming up

IATI's technical work will continue to address the remaining recommendations from IATI's 2020 Technical Stocktake to consolidate and strengthen data publishing and data use services. Key areas of work over the next year include:

- ✓ **Launching the in-house IATI Datastore** with a phased approach: The first release will comprise a public SOLR-backed API. Subsequently, and powered by that API, we'll deliver a re-imagined web interface, subsequent to assessing what functionality should be included in the IATI Datastore interface and what functionality is included in the new data portal.
- ✓ **Procuring a new, free-to-use IATI publishing tool** to provide a streamlined IATI-led publishing experience.
- ✓ **Providing enhanced Google analytics** to monitor all IATI Tools. This will allow us to better track user journeys and engage with our users.
- ✓ **New Data Portal:** Compiling a comprehensive list of user requirements and consultation to feed into requirements for a new data portal.
- ✓ **Designing and implementing a new Data Quality Index methodology:** this will follow consultation with the IATI community on what good quality data looks like and what measures should be implemented.



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► How to get involved in improving IATI tech

IATI technical services exist for publishers and users of IATI data. Whether you are new to IATI or have been working with IATI for years it would be great to have your involvement and feedback. Here are just some of the activities that you can participate in that will contribute to improving data quality:



Participate in user testing on new services



Report bugs or issues with IATI services on [Github](#)



Get in touch on [IATI Connect Technical Community of Practice](#)



We're here to help

For tech support, reach out to IATI's Technical Team via the IATI Helpdesk
email: support@iatistandard.org