

The OA Switchboard

An article-level reporting hub for Publishers,
Libraries/Institutions and Funders



About the project

The OA Switchboard initiative is a not-for-profit collaboration between funders, institutions and publishers to provide essential infrastructure to facilitate the fulfilment of open access strategies across business models, policies and agreements. The OA Switchboard is the independent intermediary, connecting parties and systems, streamlining communication and the neutral exchange of Open Access related publication-level information, and ensuring a financial settlement.

ELITEX won the OA Switchboard RFI in early 2020 in a competition with 20 other applicants, providing the best answer to the immediate requirements and showing the best experience in the scholarly information or solutions space, and evidence of competency in developing and delivering open source solutions

After being selected as the tech partner, ELITEX put together a development team for the OA Switchboard and began work on the Minimum Viable Product (MVP) immediately. The MVP was delivered in 6 iterations, total 13 weeks, within budget and timelines. After go-live with the MVP, the next stage of the project commenced, which was the Pilot phase bringing onboard publishers, institutions and funders. Throughout 2020, the project (overseen by OASPA) ran to prepare for the OA Switchboard to go live as an operational solution

The OA Switchboard moved to the operational stage on 1 January 2021, now run from an independent foundation (Stichting OA Switchboard) with ELITEX

Industry

Publishing

Technology

React, NodeJS, AWS (API gateway, Lambda, SQS, SNS and SES)

Services

Front-end development

Back-end development

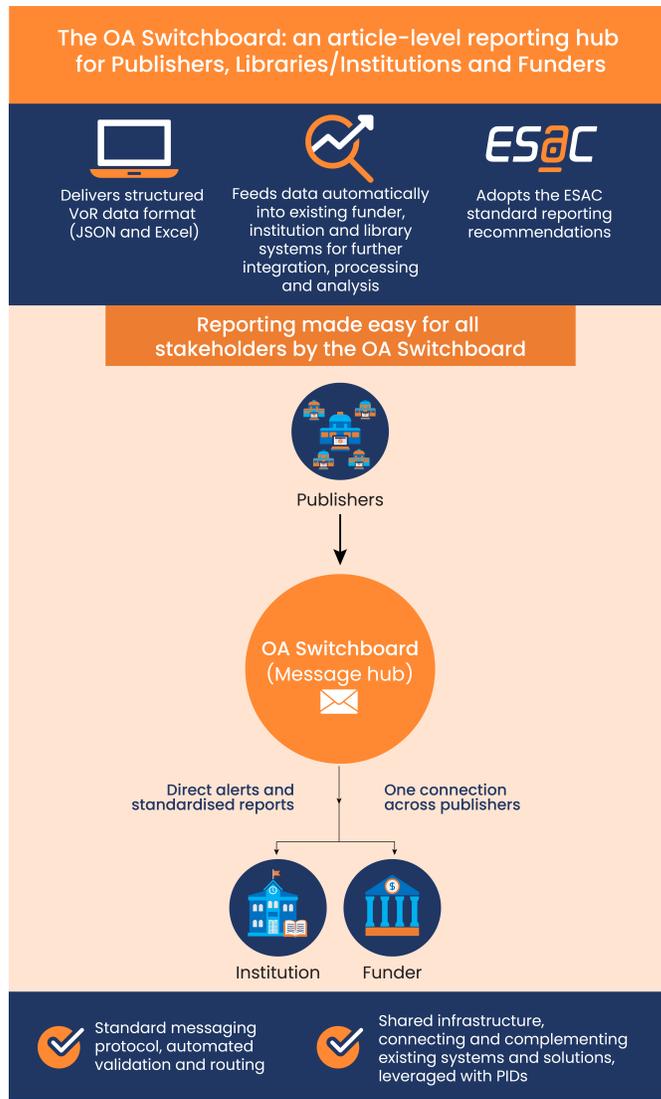
Customer's Location



The Netherlands



as their tech partner



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The core of the OA Switchboard is a message hub build around AWS messaging services like SQS, SNS and SES. This approach is highly scalable and secure. Access to the hub is implemented using AWS API gateway linked to Lambda functions that execute serverlessly. The entire core of OA Switchboard is deployed serverless. That allows OA Switchboard to operate cost-effectively, scaling up and down on demand and minimizing fixed costs.

The OA Switchboard stakeholders are expected to integrate with the Application Programming Interface (API), sending and receiving messages using a standard message structure. As an alternative, ELITEX also delivered a User Interface (UI) that can be used to compose messages, read them, create and download reports. Here is a 4-minute video that gives a good impression of the functionality in the UI:



The UI is developed on top of the Pubsweet open source framework, supported by CoKo foundation – an innovative player in the publishing industry. The UI dispatches standard messages using the standard OA Switchboard API. The open-source UI serves as a visual demonstration and a useful source of inspiration for all parties who want to connect to the API directly.



Taking into consideration that some stakeholders might be reluctant to invest in API-integration with the OA Switchboard early on we helped them to bridge the gap and reduce the effort needed vby introducing a number of generic connectors. These connectors allow publishers to start using the OA Switchboard without making any changes to their existing IT infrastructure. During the pilot phase, we created and implemented custom connectors for The Microbiology Society, The Royal Society and the American Physiological Society, making them early the adopters of the OA Switchboard. The whole project has been executed in less than a month.

