

Episciences: enhancing interoperability and metadata between an overlay journal platform, linked repositories and OpenAIRE open sciences tools and services

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EPISCIENCES: ENHANCING INTEROPERABILITY AND METADATA BETWEEN AN OVERLAY JOURNAL PLATFORM, LINKED REPOSITORIES AND OPENAIRE OPEN SCIENCES TOOLS AND SERVICES

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Episciences is a platform to publish diamond open access overlay journals.

Episciences contributes to the development of bibliodiversity by supporting an alternative path to the conventional model of scientific publication, promotes the usage of preprints and the collaboration with open repositories. The editorial process is based on a convergence of the stages of qualification, certification and dissemination and a system for recording the different versions of a document—the preprint reviewed, revised, accepted for publication, the new version, the published article are all "record of version". Thus the value chain is no longer limited to the only reference version which is the published article—"version of record"—endorsed by the journal.

Designed as an overlay of services on top of open repositories, the platform makes by design an extensive usage of API and open protocols since its inception.



DOI research data **OVERLAY SERVICES** OpenAIRE Journals hosting Notification Publication Nexus of enrichments Portfolio enrichments Qualification Certification DOI research data Dissemination EPISCIENCES PIDs **ORCIDs** Links to projects **OPEN REPOSITORIES:** arXiv, HAL, Zenodo Fulltext hosting Interoperability Long term access

A virtuous circle for metadata enrichment

Thanks to the OpenAIRE Nexus project, Episciences is integrated with the OpenAIRE service catalogue and the EOSC (European Open Science Cloud) portal. It now contributes and benefits from a new range of OpenAIRE Open Science services and tools.

The workflow starts when OpenAIRE Provide harvests our OAI-PMH endpoint to collect the publication metadata. OpenAIRE Broker Service API will then issue notifications when new enrichments of metadata are available via the OpenAIRE Research Graph. The Research Graph is then used to enrich Episciences' articles metadata with additional PIDs, links to projects, missing ORCIDs, additional classification subjects, etc. OpenAIRE ScholeXplorer API is used to identify links between articles and datasets.

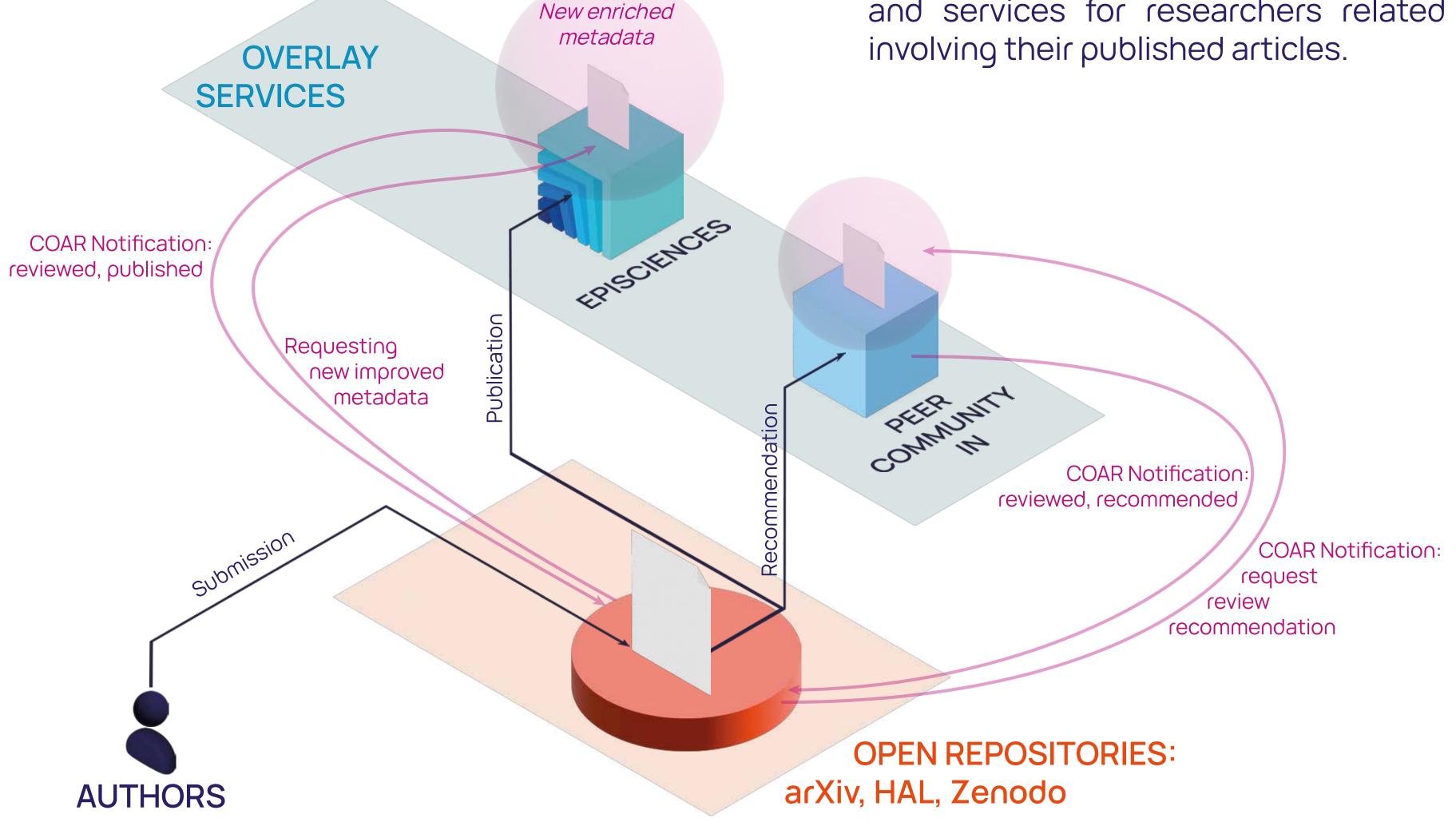
The new metadata is then displayed to end users and exposed via our APIs. Open repositories can get the new enriched metadata back from the Episciences or Crossref APIs and provide it to their end users.

A new round of updates may happen, for enriched metadata paves the way to the discovery of new links thanks to the OpenAIRE services. The platform will also soon use the OpenCitations data to provide new features and services for researchers related to the citations involving their published articles.

Implementing the COAR Notify Specifications

We have already implemented several API to be able to support semantic and technical interoperability with the open repositories. We are now in the process of implementing the COAR Notify Specifications that will allow us to enhance communication and ease interoperability between our overlay platform and any repositories. We will start with the French National repository HAL as a pilot implementation but the process can be easily reused with other repositories.

The journals will be able to exchange notifications with open repositories. For instance authors will be able to submit their preprint to a journal right after their submission on a preprint server; the preprint servers will be able to be notified when a preprint has been reviewed, endorsed and published by a journal.



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