Happy birthday! It's been one year since the EVERSE project kicked off in March 2024. We have been to conferences, held workshops, started concepts and are now, after our general assembly, ready to put our first results out there.

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Into the EVERSE

Our first year is has rounded up and after a productive general assembly, we are ready for year two. Instead of going into hibernation, our winter months have been busy with a launch event for our Network, conferences and workshops. Our series on introducing the EVERSE Work Packages continues with WP3 and we are starting a webinar series on RSQ and training topics. We wish you an informative read!

EOSC-EVERSE

EVERSE Project

Sanje Fenkart

Communications Officer

Recaps & Outlooks: Our General Assembly in Barcelona

Next to the hum of the data centre, the EVERSE general assembly meeting took place from March 21-23 at the Barcelona Supercomputing Centre. More than 50 project members joined in person and online to review the first year while getting ready for the next one.

It has been a busy first year for the EVERSE project: determining how to work on all the tasks given, what are the best ways to engage with our communities and identifying which methods will yield the most promising results while getting to know each other online. In March 2025, we finally had the opportunity to meet again in person – and via Zoom – to assess what has happened so far. Hosted by the second project lead, the Barcelona Supercomputing Center (BSC) welcomed us to its halls and computing facilities.

The first two half days were dedicated to various workshops in parallel sessions, led jointly by different work packages members. Topics ranged from training activities and engagement, via indicators and metadata, to the RSQKit and specific outputs. Afterwards, all session chairs reported on what the participants have been working on during the workshops, fostering discussion on how to tackle needs and which methods should be used again as they showed good results.

Following the previous reporting, each work package got a slot to report on their achievements from the past year and the main focus for the upcoming one. Among the main results so far were the successful launch of the EVERSE Network, the growing community contributions to the Research Software Quality Toolkit at deRSE 2025, a first iteration of the Tech Radar with the help of a full-day workshop on tools and services, and an initial collection of training resources.

With the "design phase" now mostly completed in all work packages, the focus shifted on the implementation of the desired goals. The next steps include further refinement of the RSQKit and the Tech Radar. Regarding the EVERSE Network, a new webinar series is launching in April where each month is dedicated to a topic from Research Software Quality or a training session. A crucial step will be to foster stronger connections to the Science Clusters, spread the knowledge and resources gathered in EVERSE with the respective communities. Finally, seeing how well direct engagement worked at conferences, EVERSE members will continue to participate in events with talks, workshops and posters. To reach beyond Europe, EVERSE is in the process of preparing a 1-2 day event at an African RSE conference to connect with the communities there and exchange each other's expertise.

A glimpse at the super- and quantum computing facility at the BSC, hosted inside a now empty church.

Overall, the meeting was very productive which didn't get quenched even by the perpetual rain. As a cherry on top, our BSC colleagues showed us their supercomputing facility and, especially, their centrepieces: the Mare Nostrum 5 supercomputer with its quantum computer addition. Repurposing a former church, the heart of the quantum computer is sealed under a glass box where the main nave is. Next to seeing each other again, this was definitely one of the highlights, only to be topped by delicious Spanish tapas at the conference dinner.

On the radar: WP3 - Tools and Services

Welcome back to our series of getting to know the EVERSE Work Packages. This time we take a look at WP3 which focuses on tools and services for software quality and FAIRness. They check up on what is already there, collect it into a "tech watch", work on an easier integration into the respective communities and tightly collaborate with the Science Cluster for this. Let's hear it from the Work Package leader Thomas Vuillame (LAPP-CNRS), Neil Chue Hong (UEDIN) and Kirsty Pringle (UEDIN, EPCC).

What made working on tools and services in EVERSE appealing to you?	+

Thomas: I am a physicist by training and have always struggled with developing and reusing research software for my own work. This led me to take an interest in best coding practices, the use of tools and services for software quality, and, more recently, the development of a curated repository for research software. I know firsthand the challenges of developing and maintaining high-quality research software and its crucial role in ensuring the reproducibility of scientific results. That's why I want to support colleagues and researchers across all disciplines and make their day-to-day work easier. Neil: I've had a long history of working with people who are using research software to address common barriers and blockers. Tools and services are very important, because they help a particular large segment of the community (those who are favourable to adopting new good practices, but need support to do so). These people are often time-poor, so helping people to understand the best tools and services to use is very valuable. Kirsty: I'm interested in how to make following best practices in research software easier, most people want to follow good practise

but don't always know how to do this. If we can make using tools to assess and support software more available and easier to use, we can help to support researchers write better software, which will help research.

In your own words, how would you describe what a tool and what a service is in terms of (research) software quality? +

Thomas: Tools and services for software quality are applications that can be used to assess or improve the quality of research software. Neil: Good question! I think there's not a clear dividing line, but generally I think of a tool as something you download and install locally or on the computing platform you use, whereas a service is being hosted elsewhere for you. But there are definitely things that could be classed as either.

What makes a tool or a service really standout for software quality? +

Thomas: The best tools and services for software quality are those that are too easy not to use. Even when researchers and Research Software Engineers (RSEs) are familiar with and follow good development practices, they often have limited time to dedicate to software quality, as their primary focus is on publishing scientific results quickly. We must provide them with the means to improve, maintain, and share their software effortlessly. Kirsty: It stands out when it's well-documented, easy to use, actively maintained, and backed by a supportive community. Bonus points for interoperability and adherence to FAIR principles.

How do you choose these for your output, the technology watch/tech radar? +

Kirsty: We have run a number of community events to ask people what tools they are using, these have involved both people within the EVERSE project and also representatives from the EOSC science clusters and beyond. And we are still open for more suggestions, as new tools become available or as we reach new audiences for suggestions. Now the challenge is curating this long list and linking tools to particular software quality dimensions and then indicators, which will provide a clear framework for researchers.

What has been the biggest challenge so far? +

Thomas: I think getting to know each other (coming from very different backgrounds) and understanding better our common goals has been the biggest challenge for the first year of EVERSE. Neil: The challenge is that there are so many tools and services that could be useful, and the metadata standards and guidance for describing them is still developing. So, curation is still difficult.

Kirsty: I'm excited to see how our tech radar evolves, I think that will be a really useful resource. And it links up to the RSQKit, which will be a really useful tool. Thomas: I am personally looking forward to providing tangible and working outputs such as the Tech Radar, Quality Pipelines and Quality Dashboards that people can take, start using and provide feedback. Neil: I'm keen to see how some of the work that has been done in EVERSE in the other WPs helps us build out the tools and services from WP3, in particular how the good practices being identified in different communities help shape the way that we provide advice and guidance. It's great how much the work of EVERSE intersects with so many of the activities taking place in the broader research software world, including creating Actionable Guidelines for FAIR research software, bringing together research software infrastructure providers and research software funders, and working to recognise the many professional roles that contribute to research software.

You can find the preliminary Tech Radar [here](#).

The EVERSE Network soars higher

18th February, 2025 marked an important day for EVERSE, especially for one of our main goals: the Network. The Work Package 1 team organised an online launch event where we publicly presented the ideas behind the project and the Network. In return, we wanted to hear what the participants would wish for in such a space: topics of interest and their concerns in research software quality.

One of the main outputs from the EVERSE project is the [EVERSE Network of Research Software Quality](#) (RSQ), meant to connect RSQ professionals from Europe and beyond. It aims to be a virtual "meeting space" where research software engineers, researchers who code, software developers, policy managers, students and industry partners can connect to actively work on shaping the future of RSQ together. EVERSE as a project is setting the foundation of the Network and offers its knowledge and resources on best practices, tools and services, recognition and training, while serving as an interface with the [Science Clusters](#).

While the Network has been open for sign-up since autumn 2024, we wanted to boost its uptake with an official launch event. Anyone interested in research software quality was welcome to participate in the 90-min event on 18th February, 2025. We started

with a short presentation by our project leader, Fotis Psomopoulos, on EVERSE itself. This was followed by an overview on the purpose of the Network by Graeme Stewart (WP1). During the event there was an opportunity to collect numerous questions from the audience, especially on how EVERSE defines software sustainability and about the Research Software Quality Toolkit (RSQKit).

Afterwards, we wanted to hear the needs and interests of our participants. With an interactive Slido survey, we asked where they are from, if they are involved in other RSE initiatives, if they have established guidelines at their organisations, the most important aspects of RSQ and what are the most important training topics, as well as many more. The survey, plus the option to answer questions before the event, showed that in general the interest in this kind of Network is both wished for and needed.

The overall engagement was very high, with more than 200 people registered and a peak attendance of 140. We received more questions that we could answer during the event, and, together with the results from the Slido survey, we have more than enough input to work through - a full summary with materials will be published. This, together with our EVERSE resources, will be the basis to shape the Network and its goals for a sustainable way to shape future efforts in research software quality.

EVERSE Webinar series

As part of our EVERSE Network activities, we are now launching a monthly webinar series. We will vary between a a specific topic from RSQ and a training session. The upcoming webinars will be continuously updated on our webpage, send out by email to signed-up Network members and posted on our social media handles.

[Webinars]

Community growth at deRSE25

The EVERSE team participated in deRSE25, the German Research Software Engineering Conference held in Karlsruhe. Our engagement

included three main contributions: a RSQKit content-a-thon, a skill-up session on research software lifecycles, and a project poster.

The RSQKit session was held at the start of the conference, before the plenary sessions began. Giacomo Peru and Guido Jukeland organised and introduced the session; Carlos Martinez, Aleksandra Nenadic and Shoaib Sufi offered remote support, while Elena Breitmoser, Neil Chue Hong, Faruk Diblen and Graeme Stewart offered on-site support. This approach worked well, with over 30 participants engaging with the platform. The session introduced the RSQKit, a knowledge hub for research software quality expertise developed within the EVERSE project, and demonstrated contribution workflows, resulting in several new contributions that are now under review by the editorial board. Neil Chue Hong organised an impromptu breakout to help attendees who were unsure about how to contribute, while Graeme Stewart ran a small breakout focusing on Julia resources. This collaborative approach ensured everyone could participate regardless of their experience level.

The 2-hour interactive workshop generated a lot of feedback on improving the RSQKit. Participants identified areas for enhancement, including lowering the barrier to entry for everyday researchers, providing clearer introductions on the homepage, and creating better entry points based on user experience levels. They also suggested organising content around questions that users might ask, such as "I want to find a tool for..." to make navigation more intuitive.

Workshop participants created numerous GitHub issues covering documentation improvements, content organisation, and suggestions for new tools and resources to add. These included tutorials and cheat sheets, pages for continuous integration, containerisation tools, and Fortran-specific resources. Discussions also centred on better defining user personas and roles, with participants suggesting different tracks for different types of users and clearer indications of expertise level for each resource.

Participants working on the RSQKit Contetathon during deRSE25.

Our skill-up session on research software lifecycles was well-attended, with more than 20 participants. Giacomo Peru presented the first part on metadata for research software, with a focus on CFF and CodeMeta. This was followed by an in-depth look at FAIR assessment presented by Elena Breitmoser and Faruk Diblen. They presented the FAIR4RS Principles (FAIR for Research Software), explaining how these principles provide non-normative guidance that helps facilitate provenance and proper credit attribution. They outlined the metrics for automated FAIR software assessment developed through the FAIR-IMPACT project, demonstrating three complementary tools: the [CFFinit tool](#) which helps developers create citation files, the [F-UJI too](#)l which is an extension of the automated FAIR-assessment tool for data to research software based on the FAIR4RS principles, and the [howfairis tool](#) which checks a repository's compliance with the five recommendations from [fair-software.eu](#).

The conference showed recognition of EVERSE across the German RSE community, suggesting our previous outreach efforts have been effective. The RSQkit was referenced in the first keynote speech, elevating its potential as a resource within the RSE community. This recognition, despite its work-in-progress status, shows the community's interest in such resources.

A breakout group formed to learn more about how and what to contribute to the RSQKit contentathon, led by Neil Chue Hong.

Beyond our specific sessions, the conference provided networking opportunities with the German RSE community, which is experiencing growth supported by new funding for community development. The co-location with a software engineering conference created connections between software engineering researchers and research software engineers. Relevant to EVERSE was also the discussion around the place of research software engineering in future versions of the Software Engineering Book of Knowledge gith(SWEBOK)", with a position paper accepted for an [upcoming summit](#) in Ottawa as part of ICSE25.

The experience at deRSE25 has reinforced the value of our community-building efforts and provided lessons for future engagement. As we continue to develop these resources and relationships through EVERSE, we'll focus on simplifying contribution workflows and creating more accessible materials for the diverse experience levels we encountered at the conference.

Written by Giacomo Peru, Elena Breitmoser, Neil Chue Hong, Graeme Stewart

MS8 workshop

On 10th February, the first EVERSE all-day workshop on the "Evaluation of tools and services to improve the quality of research software" took place, organised by Work Package 3 and especially the planning committee (Elena Breitmoser, Kirsty Pringle, Thomas Vuillaume, Faruk Diblen, Azza Gamgami, Daniel Garijo, Neil Chue Hong and Fotis Psomopoulos). This workshop plays a crucial role in fulfilling one of the project's milestones.

The goals of the workshop were to provide a platform for knowledge exchange and to foster discussion about relevant tools and services used to access and improve the quality of research software, including FAIRness. We wanted to capture existing practices across communities, offer a space where participants can learn from each other and identify gaps in available tooling.

Over 90 people registered their interest in the workshop in advance, with roughly over 40 attending on the day at its peak. The attendees came from a variety of places and countries across Europe, over 70% considering themselves as mid-career or above and 56% not being part of any of the EOSC Science Clusters.

The workshop started with an introduction and background information to set the scene, followed by a poll on people's backgrounds, interests and experience with software quality tools (e.g. Figure 1 showing the software quality tools participants have started using recently).
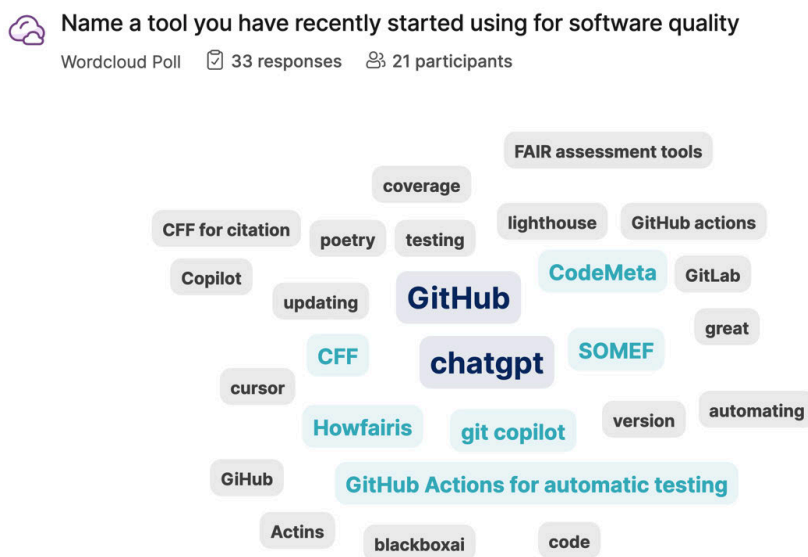
Fig. 1 is showing which tools have been or are currently used in terms of software quality, helping with the assessment for EVERSE.

We had three invited Research Software Engineers, Mike Jackson from EPCC, and Steve Crouch and Philly Broadbent, both from SSI Southampton, reporting on their favourite software quality tools. This was followed by more interactive sessions with

guided discussions in breakout sessions. The workshop ended with a wrap-up and reporting back from the various breakout sessions, giving the audience the opportunity to share with everyone what they had found most interesting or useful during the day.

The workshop agenda as well as the presented slides and filled-in forms on the software quality dimensions "Usability, Technical Performance, Documentation/Technical Support, Testing and Safety/Security" can be found in our GitHub repository.

Ultimately, the gained knowledge will feed back into the wider EVERSE project to provide the RSQKit service with the means to make this kind of software tools and training more easily accessible across various scientific domains. Apart from a more concise report to the EU, we are about to release a more detailed report for those within the EVERSE community.

By Elena Breitmoser (UEDIN, EPCC)

Announcements & Outlook

First EVERSE Webinar: 15th April, 10.00 CEST!

Indico

Can't attend our online events? Check out our new YouTube Channel!

EVERSE YouTube

The first edition of the EOSC Federation Handbook is out now!

Handbook

Find us at the HEP/WLCG Workshop at IJCLab in Paris from 5-9 May, 2025!

More infos