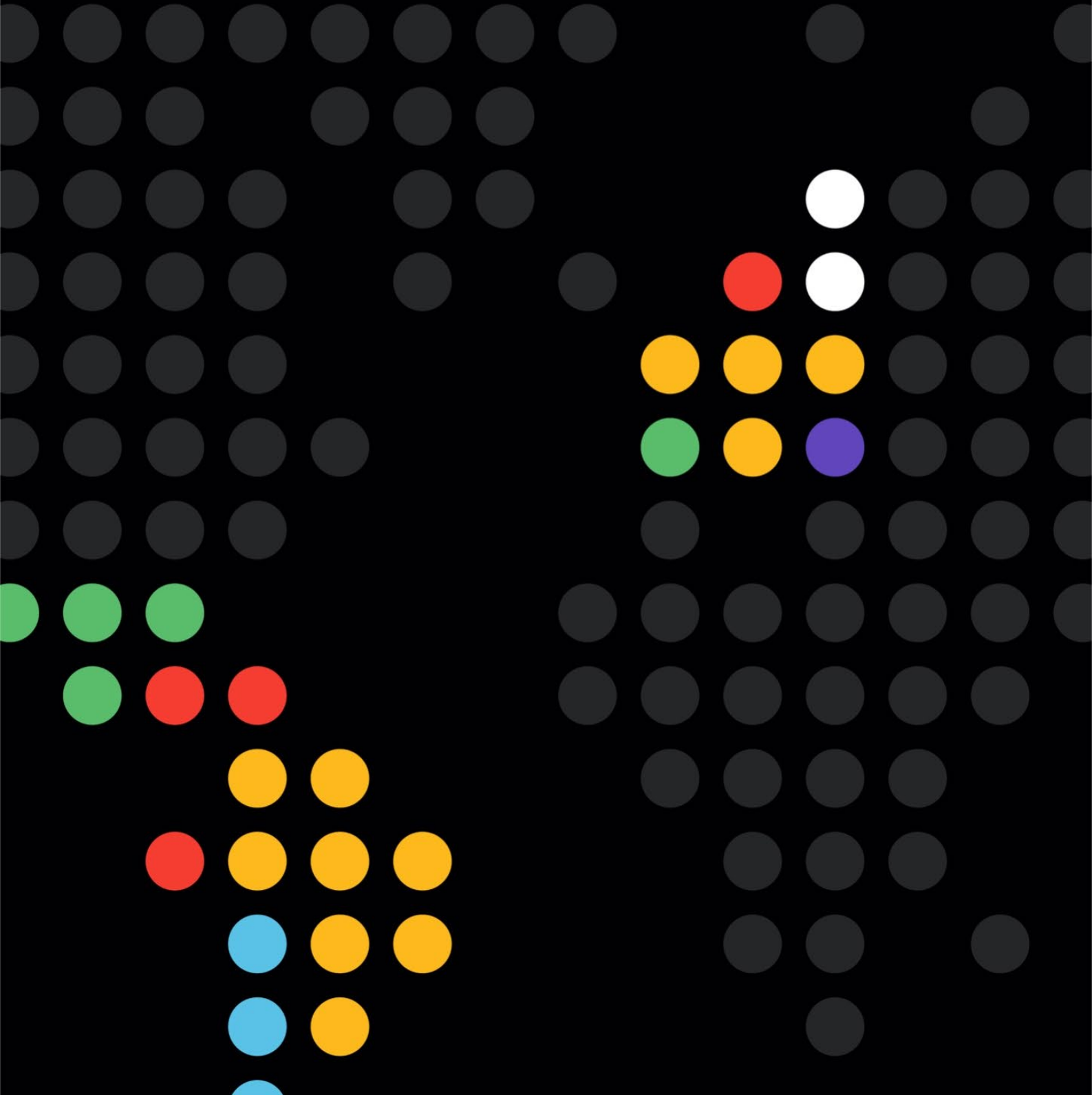


RISC2



Deliverable 2.3

The HPC Observatory



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101016478.

Document Information

Contract Number	101016478
Project Website	https://www.risc2-project.eu/risc/
Contractual Deadline	30.06.2022
Dissemination Level	PUBLIC
Nature	ORDP
Author	Amalia Hafner
Contributors	Fabrizio Gagliardi, Paula Rodrigues
Reviewer	Lara Querciagrossa
Keywords	HPC Observatory

Change Log

Version	Description Change
V0.1	First draft
V1.0	Version delivered to the European Commission
V0.3	

Table of Contents

1. INTRODUCTION	4
2. THE HPC OBSERVATORY	4
2.1. The Editorial Board	6
2.2. HPC Centres	6
2.3. News and Events	7
2.4. Target audience.....	8
5. SUMMARY	9
ACRONYMS AND ABBREVIATIONS	10

DISCLAIMER

The sole responsibility for the content lies with the authors. It does not necessarily reflect the opinion of the European Commission (EC). The EC is not responsible for any use of the information contained therein.

1. Introduction

All regions now see intense investments in HPC as essential to compete globally. In this context, coordination and capacity sharing between allied regions are crucial. The RISC2 project gathers key European and Latin American High-Performance Computing (HPC) actors to encourage more robust cooperation between their research and industrial communities on HPC applications and infrastructure deployment.

RISC2 disseminates the activities and results through dedicated project communication tools, such as the project website and its HPC Observatory, to identify common challenges, ideas for cooperation, and critical issues.

The HPC Observatory includes relevant information to map Latin American research and industrial ICT actors, research capabilities, and collaboration needs. Moreover, the HPC Observatory facilitates access to information about collaboration opportunities with their EU counterparts in the HPC area.

2. The HPC Observatory

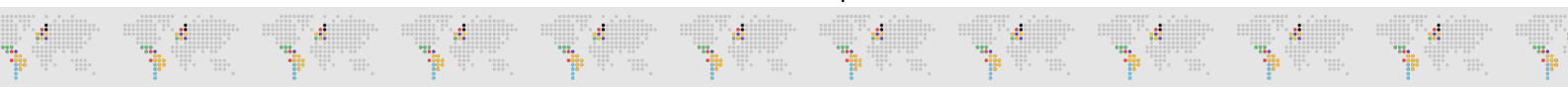
The HPC Observatory is one of the deliverables within WP2. The information structure and sources were presented through D2.2, delivered in February 2022. This report, D2.3, shows the progress made in terms of content, including screenshots of the website, which is already accessible at <https://www.risc2-project.eu/hpc-observatory/>.

The HPC Observatory is dedicated to analysing the social and research implications of HPC. The Observatory is supported by multiple RISC2 partners and is maintained using its resources to ensure its continuation past the project's end. The objective is to serve as a think tank that European and Latin American research organisations can resort to when looking for HPC-related information. An editorial board appointed by the RISC2 consortium identifies and assesses information and its relevance to the objectives of RISC2.

The HPC Observatory is available as a dedicated section on the project website (<https://www.risc2-project.eu/>).

The HPC Observatory consists of four sub-sections:

- a) **About:** Brief presentation of the HPC Observatory objectives and sections (“Repository”, “Centres”, and “News and Events”) and the Editorial Board that supports it.
- b) **Repository:** This section (to be completed after August 2022) will include a collection of the reports and training materials produced during the RISC2 project lifecycle. Reports will be published upon their approval by the project monitors. Training materials will be made available upon completion of the training events for which they were produced. All files will be available for download in pdf format.
- c) **Centres:** List of relevant HPC research and industrial organisations in LATAM. The HPC Observatory collects information from national sources and each HPC-related organisation's website. Details are described in section 2.2 below.
- d) **News and Events:** This section offers news, information on past and upcoming events, collaboration opportunities, and relevant reports. In addition to news on the RISC2 activities, information in this section



is collected from publicly available websites and newsletters. Data from these sources is published through the HPC Observatory, including references to the original publication. More information on the News and Events can be found in section 2.3 below.

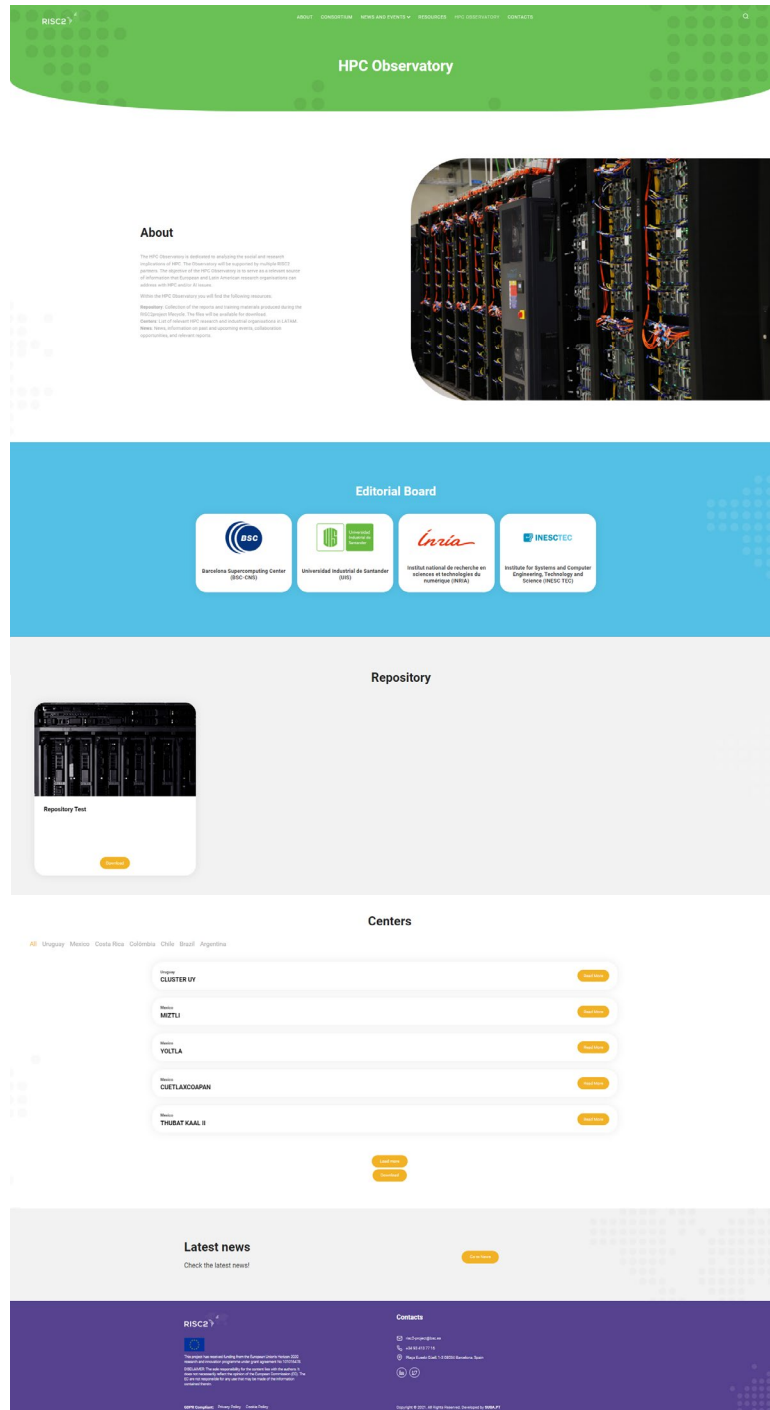


Figure 1 Screenshot the HPC Observatory section within RISC2 website

2.1. The Editorial Board

The Editorial Board is in charge of identifying relevant information to disseminate through the HPC Observatory.

The Editorial Board is chaired by the WP2 leads (BSC and UIS) and the WP5 lead (INESC-TEC). Inria supports the Editorial Board.

2.2. HPC Centres

The main section of the HPC Observatory is a list of relevant HPC resources within research and industrial organisations in LATAM. Readers can navigate through the list, filter per country, and click on each entry to read detailed information on the system.

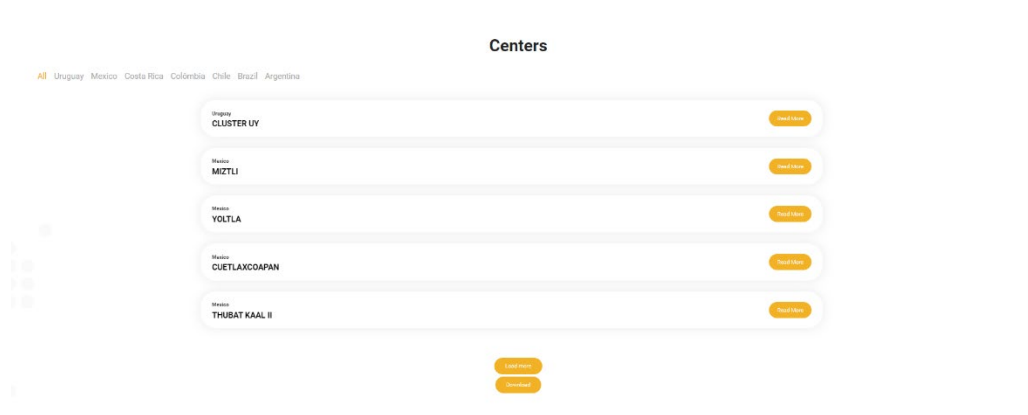


Figure 2. Screenshot of the section Centers within the HPC Observatory.

Information on the HPC resources per RISC2 targeted country is displayed following a template that includes the items listed below.

- System name
- Hosting site
- Site location
- Country
- Website
- Processor architecture
- Operative system
- Vendor
- Peak performance
- Research and application domain(s)
- Access policy

These items were defined based on relevant reports on the HPC landscape: "The EuroHPC JU Supercomputers: Analysis of the Petascale and Pre-exascale systems" (September 2021) and "ETP4HPC's SRA 4 2020: Strategic Research Agenda for High-Performance Computing in Europe" (March 2020).

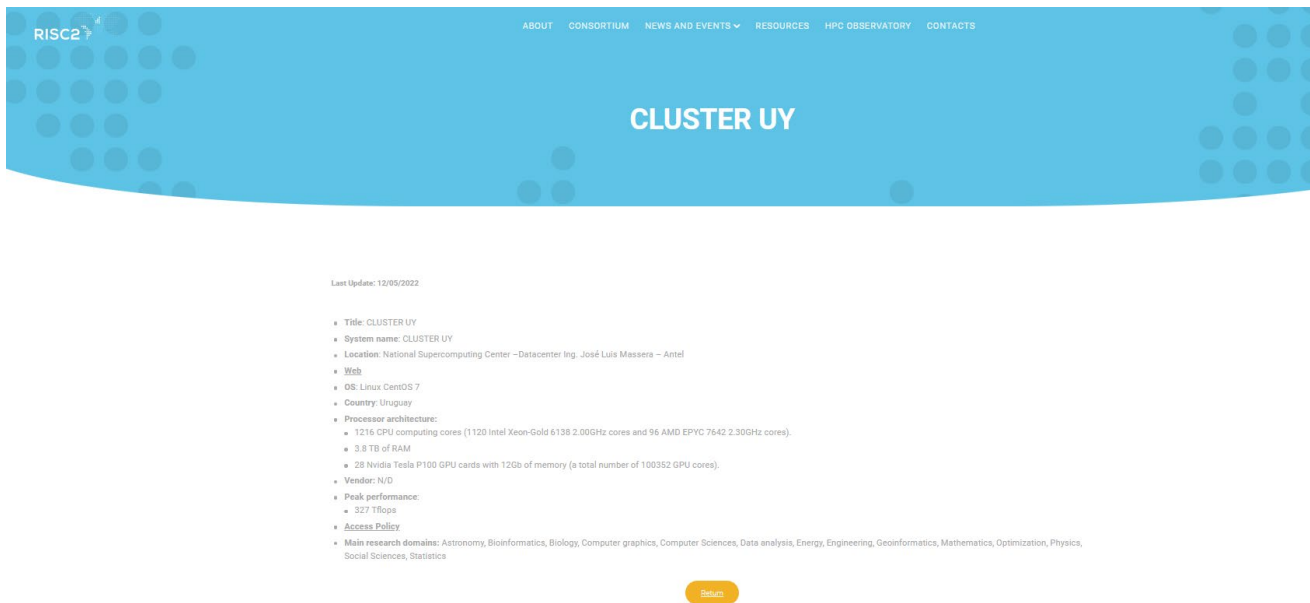


Figure 3. Example of sub-page within the section dedicated to HPC centres.

The data to populate the section **Centres** within the HPC Observatory is based on the relevant HPC resources identified by LATAM partners when producing the D2.1 *White Paper on HPC R&D*. Additional information was sourced from publicly accessible information on each organisation's website.

Today, the HPC Centres section offers information about 38 HPC systems in Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico and Uruguay.

Readers can download the information about HPC centres in .csv format if desired.

2.3. News and Events

This section can be found at <https://www.risc2-project.eu/news-events>. It is accessible through the HPC Observatory and from the website's main page.

It includes the news produced by the consortium during the project lifecycle, information about past and upcoming events in which RISC2 partners participate, and relevant news shared by the HPC Observatory, pointing to their source.

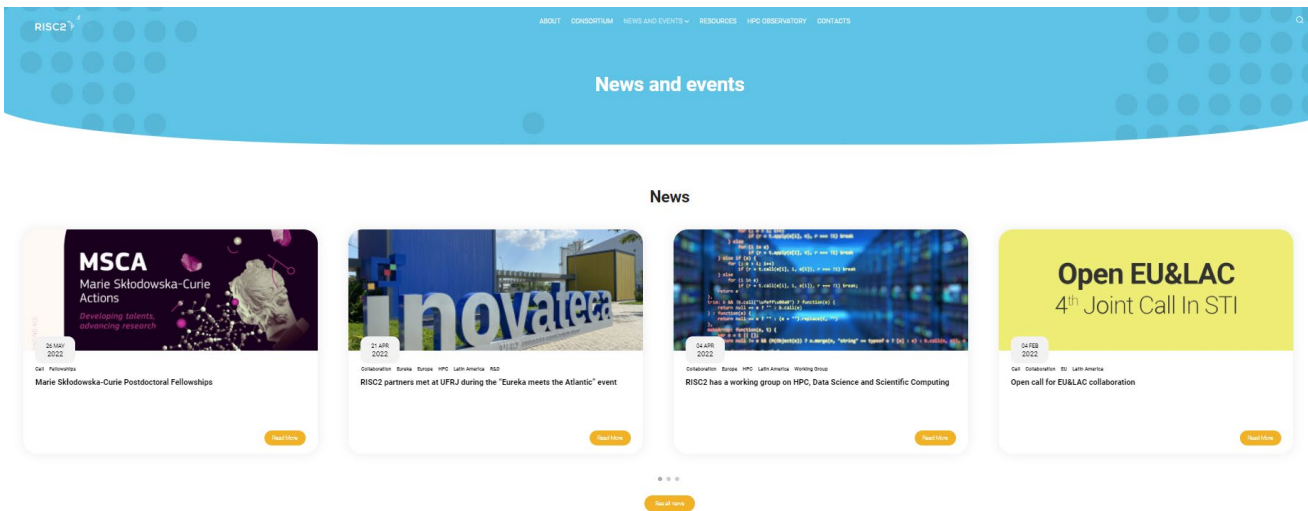


Figure 4. Screenshot of the latest news shared through the website.

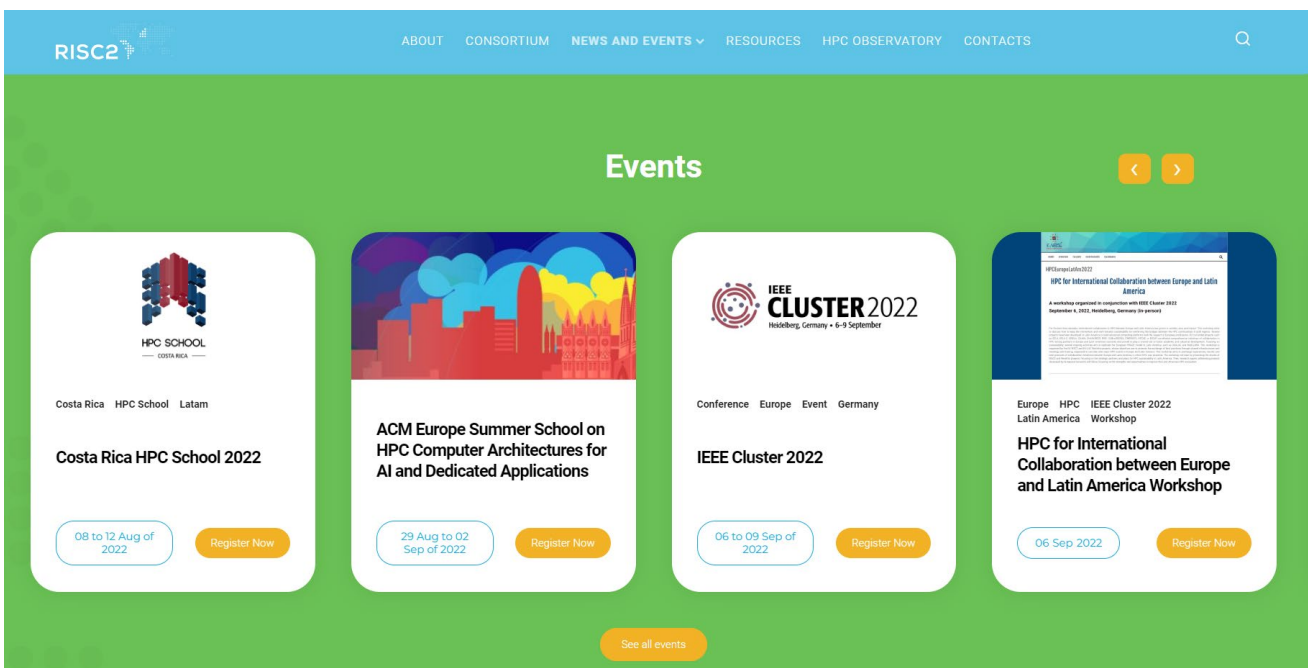
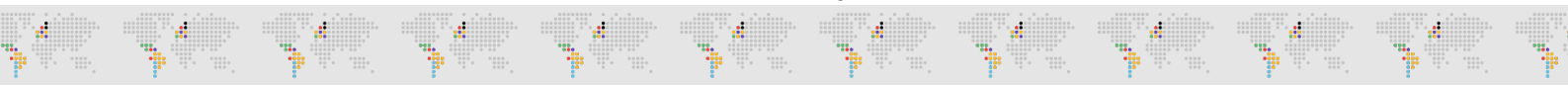


Figure 5. Screenshot of the latest events shared through the website.

2.4. Target audience

As a dedicated section within the project website, the HPC Observatory targets the audience defined in the D5.1 Dissemination, Communication and Exploitation Plan. In this vein, the Plan had defined the target audience for the communication materials by identifying four groups:

- The HPC community
- Research actors (public and private)
- Industry
- General public



The section on **News and Events** and the **Repository** (focusing on training materials) could be of particular interest to the HPC community and the public. The section on **Centres** will likely be helpful for research and industry stakeholders since it offers an overview of the HPC landscape in LATAM, including technical and access information that might be of use when exploring potential collaboration opportunities.

Readers can subscribe to the project newsletter by filling in a subscription form, accessible at the bottom of the main page (<https://www.risc2-project.eu/>) and agreeing to the Privacy Policy (described in the D1.2 *Data Management Plan*). Subscribers receive one email every two months, including the updates and new information shared through the HPC Observatory.

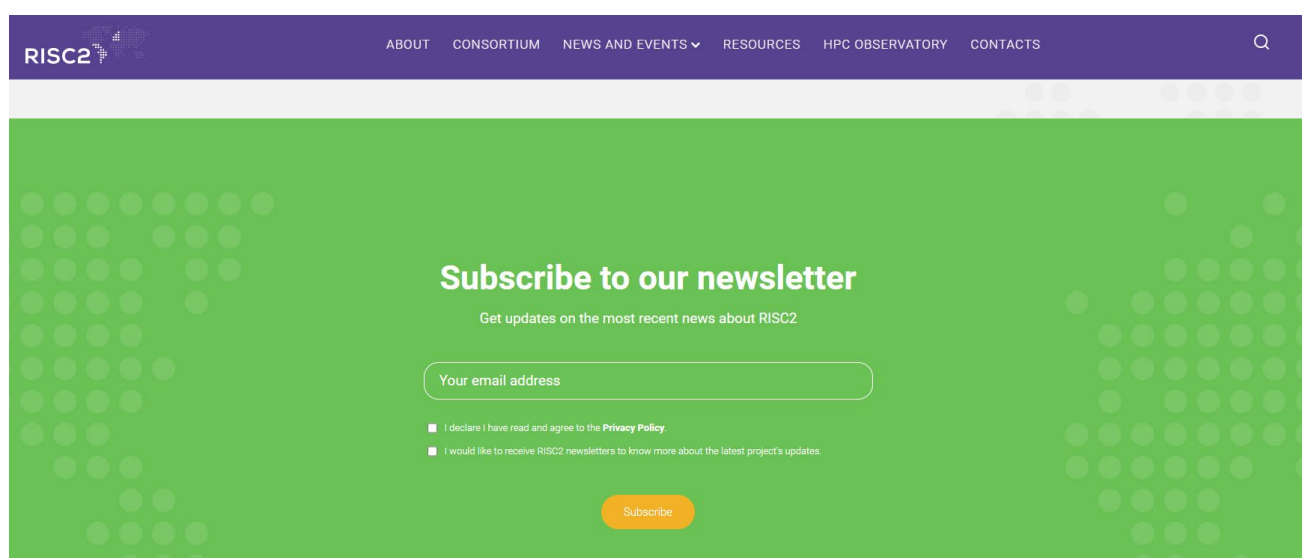


Figure 6. Screenshot of the subscription form.

5. Summary

RISC2 included the HPC Observatory as a dedicated section within the RISC2 project website.

The HPC Observatory has three main sections, corresponding to news and events (section "News and Events"), a repository of relevant reports (section "Repository"), and information on LATAM key HPC resources (section "Centres").

This report shows the HPC Observatory's progress in terms of content. The consortium has identified relevant sources and published information to populate the sections "Centres" and "News and Events".

The third iteration of this document will include an update on the HPC Observatory content. In addition, it will describe the plans to maintain the HPC Observatory beyond the project's lifecycle.

Acronyms and Abbreviations

BSC	Barcelona Supercomputing Center/Spain
ETP ₄ HPC	European Technology Platform for High-Performance Computing
EU	European Union
HPC	High-Performance Computing
ICT	Information and Communication Technologies
INESC TEC	Institute for Systems and Computer Engineering, Technology and Science/Portugal
JU	Joint Undertaking
LATAM	Latin America
SRA	Strategic Research Agenda
UIS	Universidad Industrial de Santander/Colombia
WP	Work Package