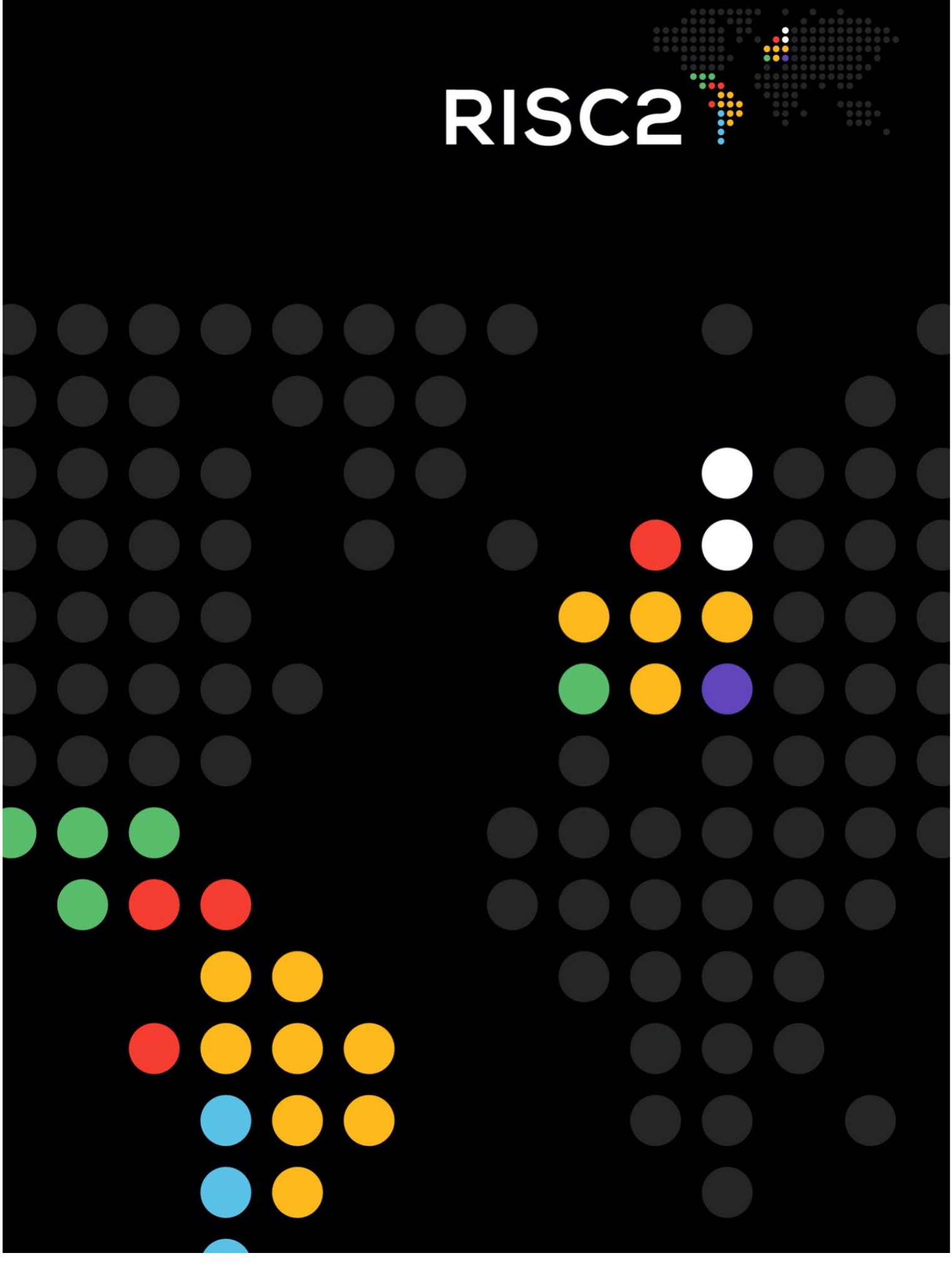
RISC2

Deliverable 2.2

HPC Observatory

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Change Log

Version	Description Change
V0.1	First draft
V1.0	Document formatted for submission

Table of Contents

1. Introduction

High-Performance Computing (HPC), used to be promoted mainly by the big science and defense communities. However, with the recent advent of AI and IoT, wider use of HPC is bringing new benefits to areas such as industry, commerce, healthcare and the economy in general. All regions now see intense investments in HPC as an essential in order to compete globally. In this context, coordination and capacity sharing between allied regions is crucial. The RISC2 project gathers eight key European HPC actors and the main HPC actors from Brazil, Mexico, Argentina, Colombia, Uruguay, Costa Rica and Chile, to encourage stronger cooperation between their research and industrial communities on HPC applications and infrastructure deployment. An external Advisory Board made up of distinguished experts from Latin America and Europe supports the project.

RISC2 promotes the exchange of best practices through meetings, workshops and training, and build on the already strong relationships of the consortium partners; on the results of the previous RISC project, and on the use of platforms like the Ellalink Subsea Cable[1]. The main project deliverable will be a cooperation roadmap aimed at policymakers, the scientific community and industry, identifying key application areas, HPC infrastructure and policy requirements, and exploring ways for the activities established during the project to last beyond its lifetime.

RISC2 disseminates the activities and results through dedicated project communication tools, such as the project website and the HPC Observatory. In this vein, RISC2 Consortium will create the HPC EU-LATAM Observatory with the mission of identifying common challenges, ideas for cooperation and critical issues. To do so, the Observatory will include relevant information to map Latin American research and industrial ICT actors, to identify their specific research capabilities, collaboration support needs, and provide information to them on collaboration opportunities with their EU counterparts in the HPC area.

2. The HPC Observatory

The HPC Observatory is one of the deliverables within WP2. It is dedicated to analysing the social and research implications of HPC. The Observatory will be supported by multiple RISC2 partners and will be maintained using its resources to ensure its continuation past the project end. The objective is to serve as the de facto think tank that European and Latin American research organisations can address with HPC and/or AI issues. An editorial board appointed by the RISC2 consortium will assess the quality of the information, its relevance to the objectives of RISC2, and the format.

The HPC Observatory will be available for the public through the project website (**https://www.risc2-project.eu/hpc-observatory/**) as a dedicated section. The HPC Observatory will consist of four sub-sections:

a) **About**: Brief presentation of the HPC Observatory objectives and the Editorial Board that supports it.
b) **Repository**: Collection of the reports and training materials produced during the RISC2project lifecycle. The files will be available for download in pdf format.

[1] https://ella.link/

c) **Centers**: List of relevant HPC research and industrial organisations in LATAM. The HPC Observatory will collect information to build the profiles from each organisation's website.
d) **News**: 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. Information from these sources is published through the HPC Observatory including references to the original publication.

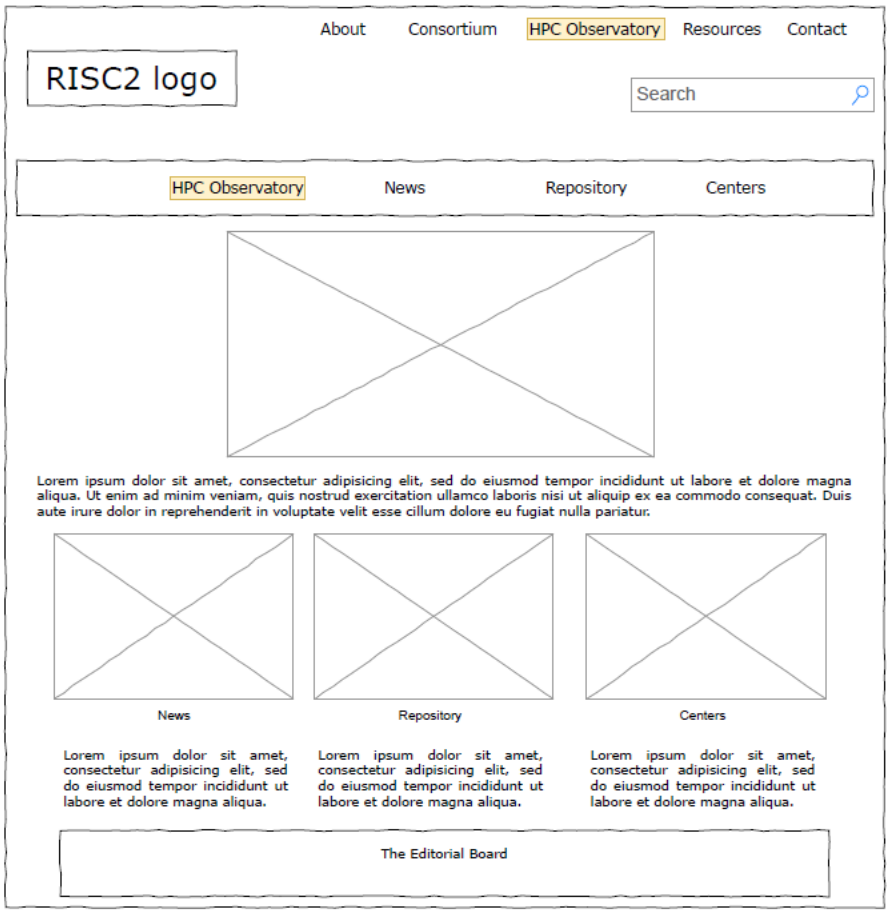

Figure 1. Prototype of the HPC Observatory section within RISC2 website

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). Two additional partners (one from Europe and one from LATAM) support the Editorial Board.

2.2. HPC Centers

The focus of the HPC Observatory is a list of relevant HPC research and industrial organisations in LATAM. Readers will be able to navigate through the list, filter per country, and click on each entry to read detailed information on the center.

Information on the HPC centers per country (RISC2 LATAM partners) will be displayed following a template that includes the items listed below.

- System name
- Hosting site
- Site location
- Country
- System overview
- Programming environment
- Research and application domain(s)
- Access policy
- Relevant project(s)
- Contact information

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)[2], and "ETP4HPC's SRA 4 2020: Strategic Research Agenda for High-Performance Computing in Europe" (March 2020)[3].

The data to populate the section **Centers** within the HPC Observatory is sourced from publicly accessible information in each organisation's website. The identification of the centers –and their respective websites- will be based, at a first stage, on an update of the Green Paper elaborated during the original RISC project (2013), in sections "HPC infrastructure" per country, under section 4. Overview of the HPC Activity in LA.

Readers will be able to download the information about HPC centers in .csv format, if desired.

2.3. News

This section is accessible both through the HPC Observatory and from the website's main menu.

It includes the news that are produced during the project lifecycle, information about the events in which RISC2 partners participate or organize, as well as relevant news shared by the HPC Observatory, pointing to their original source.

2.4. Target audience

The HPC Observatory, as a dedicated section within the project website, targets the audience defined in 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

[2] https://eurohpc-ju.europa.eu/sites/default/files/2021-10/EuroHPC%20Systems%20Report-Sep2021.pdf
[3] https://www.etp4hpc.eu/sra.html

The section on **News** (especially the information regarding events), and the **Repository** (focusing on training materials) could be of special interest for the HPC community and the public. The section on **Centers** will likely be useful for research and industry stakeholders, since it will offer an overview of the HPC landscape in LATAM including technical and contact information that might be of use when exploring potential collaboration opportunities.

Readers are invited to subscribe to the project newsletter, by filling in a subscription form and agreeing to the Privacy Policy (described in D1.2 Data Management Plan). Subscribers receive one email every two months, consisting of the updates and new information shared through the RISC2 website, including the HPC Observatory section.

5. Summary/conclusions

At this stage of the project, RISC2 has defined the structure of the HPC Observatory as a dedicated section within the RISC2 project website. This report describes the sections that compose the HPC Observatory and identifies the sources of information.

The HPC Observatory has three main sections, corresponding to news and events (section "News"), a repository of relevant reports (section "Repository"), and information on LATAM HPC key players (section "Centers"). The information on centers will be displayed following a template. Additionally, users will be able to download the complete list of centers and associated information in a .csv file.

The second iteration of D2.2 will reflect the progress made in terms of content, by describing:

- The number of news shared through the website.
- The publication of the White paper on HPC RDI in the repository (D2.1).
- The coverage of HPC centres by country.

Acronyms and Abbreviations

AI	Artificial Intelligence
BSC	Barcelona Supercomputing Center/Spain
DMP	Data Management Plan
FAIR	Findability, accessibility, interoperability, and reusability
HPC	High-Performance Computing

INESC TEC	Institute for Systems and Computer Engineering, Technology and Science/Portugal
IoT	Internet of Things
LATAM	Latin America
UIS	Universidad Industrial de Santander/Colombia
WP	Work Package