



RESEARCH DATA ALLIANCE

Consolidating the Global Research Data Alliance (RDA)

RDA Strategic Plan 2020-2023

Final version January 2021

Context:

This document is a final version of the RDA Strategic Plan 2020 – 2023. It has been designed, developed and drafted by the RDA Council since June 2020. The RDA Governance bodies (Technical Advisory Board, Organisational and Affiliate members) as well as the RDA Funders Forum have provided feedback and comments. This versions includes feedback received from the community during a public consultation period (Nov - Dec 2020)..

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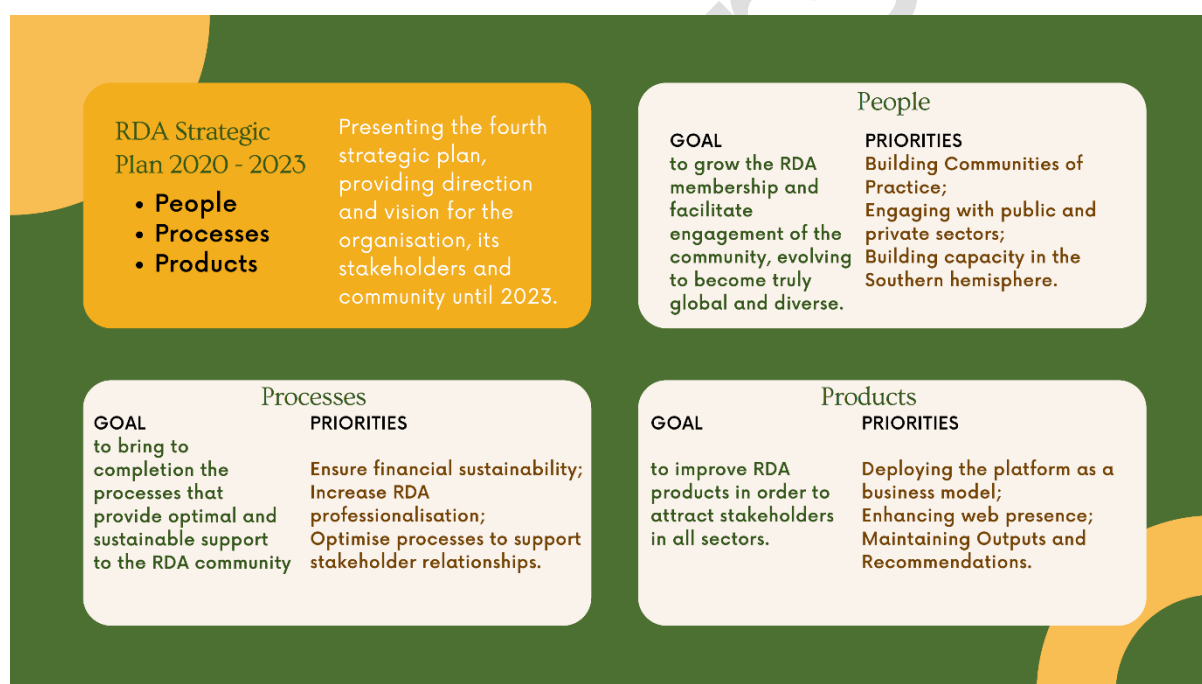
Introduction

Almost eight years after its launch in 2013, the Research Data Alliance (RDA) presents its fourth strategic plan, providing direction and vision for the organisation, its stakeholders and community until 2023.

Section 4 forms the core of this strategic plan. It outlines the strategic goals and priorities for this phase, organised in three macro areas: People, Processes, and Products.

The strategic plan starts with an historic overview and revisits the goals and achievements of the previous strategic plan and outcomes. In section 2 the organisational identity, mission, vision and guiding principles are reiterated. Section 3 has a focus on the current internal and external developments that affect the organisation and need to be taken into account.

The strategic plan is complemented by an internal implementation plan, containing concrete activities, a detailed planning timeline, and KPIs to monitor and measure the progress and success. This success depends on collaboration, cooperation and co-creation between the global community and the RDA governance and operational bodies.



1. History and Context

1.1. The Origins of RDA

Over the last decade the growing need for infrastructure to support data sharing and re-use became an important topic both within the research data community as well as amongst funders and policymakers from around the world.

At the encouragement of funders from the United States, Europe and Australia, a small international group initiated discussions in 2012 about the need to catalyse the development of data sharing infrastructure through the inception of a new international organisation.

The RDA was created to accelerate this development, and the deployment of useful infrastructure enabling data sharing and data-driven exploration. Researchers are often hampered by sparse or inadequate standards, models, common metadata, interoperability frameworks, etc., needed to facilitate effective data sharing practices. The RDA was created to help identify and remove those roadblocks.

The RDA was launched as a community-driven organisation in March 2013 by the European Commission, the United States National Science Foundation, the National Institute of Standards and Technology, and the Australian Government's Department of Innovation, with the goal of building the social and technical infrastructure to enable open sharing and re-use of data. The funders not only recognised the need for this infrastructure, but also the importance of encouraging the community to self-organize for this purpose.

The RDA has a grass-roots, pragmatic and inclusive approach covering all data lifecycle stages, engaging data producers, users and stewards, as well as addressing data exchange, processing, and storage. It provides the neutral collaborative platform where international research data experts meet to exchange views and to agree on topics including social hurdles on data sharing, education and training, data management plans and certification of data repositories, disciplinary and interdisciplinary interoperability, as well as technological aspects.

Right from its launch in 2013 at the first Plenary in Gothenburg, the RDA struck a chord. Since then, the organisation has attracted more than 11,000 members from some 145 countries and developed infrastructure and solutions used by groups all over the world. ^{1 2}

1.2. Strategic Phases



¹ <https://www.rd-alliance.org/about-rda>

² <https://hdsr.mitpress.mit.edu/pub/i4eo09f0/release/1>

To be adaptive to an ever-changing data and research landscape, RDA seeks to be an agile organisation responding to change while continually planning for an impactful future. In the eight years of its existence RDA has gone through a number of strategic phases.

2013-2015: Inception

In the first years of its inception the focus was on the organisational set-up. The Working and Interest Groups became the core of the RDA. The case statements and charters of the Groups as well as their outputs were vetted and evaluated by an elected Technical Advisory Board (TAB). The administration and daily operations of the organisation were supported by the RDA Secretariat, led by the Secretary General. The fee-paying organisational members of RDA were represented by the Organisational Advisory Board (OAB). The responsibility for the sustainability and the overarching strategy of the organisation was put in the hands of an elected RDA Council.

2015-2017: Direction

Two years after the inception of RDA, in early 2015, the organisation was largely in place and it was the right time to define a new strategy for the years ahead. The RDA Council charged a small planning group to lead a “future directions” strategic planning activity for RDA. The team convened a broadly representative workshop at Plenary 5 in San Diego and conducted a series of community engagement activities, including webinars and a member-wide survey. The ultimate result was a short report (The Future Directions report³) outlining activities to advance the external communications, member engagement, and general coordination of RDA. Council approved the report in January 2016, and it has guided the RDA’s business activity since then.

During this phase of the RDA strategy, the focus was on the following areas:

Coordination:

RDA should:

- more effectively coordinate across its components;
- more effectively coordinate between technical, social and domain efforts;
- better coordinate its operations.

Communications:

RDA should:

- become a global voice for data;
- more effectively communicate the importance of social infrastructure for data;
- more effectively tailor its stories to different communities;
- improve internal communications.

Engagement:

RDA should:

- more strongly engage with domain-based data initiatives;
- be a forum for improved engagement between research and industry over data;
- engage with its own future.

Over the years a lot of progress was made on the Future Directions initiatives, and is now largely an ongoing set of tactical activities.

³ <https://rd-alliance.org/rda-future-directions-document-rda-communications-engagement-and-coordination.html>

2017-2020: Roadmap

In 2017 the strategy was revisited. By that time the RDA had become a well-known brand in the global science community with over 6,000 members, covering most scientific disciplines. The rapid growth and the high reputation of the RDA were a great achievement in a short time frame, and provided a good basis for future development.

But the success of the RDA also created shortcomings, as the rapid growth exceeded the organisational and infrastructural supports. New and pressing strategic issues emerged, notably sustainability, growth management, regional engagement and the need for a clearer value proposition.

After five years it was time to transform from a start-up, project-like organisation, into a mature, sustainable, scalable and professional organisation, that was well-equipped to support its growing community of professional volunteers. A resilient RDA was needed, able to deliver on its commitments and satisfy its community and stakeholders.

The need for financial sustainability was the most important strategic issue for the RDA in this new Roadmap phase. Closely related to this was the need to revisit the value proposition of RDA, including articulating its unique selling points and its mission, vision and principles.

Growth management was another issue that had arisen as an important strategic topic: the RDA had over 6,000 individual members, almost 50 organisational and affiliate members, and nearly 90 Working and Interest Groups. At the same time, organisational bodies like the Secretariat and the TAB had not been expanded. This resulted in a situation where TAB workloads were unsustainable and routine process management dominated work and cut into basic communications and more strategic efforts. The community was also overwhelmed by the breadth of activity and had difficulty navigating the complexity of the RDA.

Finally, regional governance structures were being developed in the US, Europe, and Germany. At the same time, a major initiative within the new RDA Europe grant was to facilitate the creation of “national nodes” across Europe, impacting local and regional governance. There was a clear need to develop policies defining the relationships between what has become known as RDA Global, and the different regional, national, and local initiatives and entities: what should RDA Global specifically control and endorse, and how does that relate to different regional structures and finances?

2020-2023: Consolidation

During the past years the focus has been on the transformation of the organisation from a start-up into a mature, sustainable and professional organisation. Significant progress has been made in the different key areas. In the coming strategic period these achievements need to be clearly and firmly consolidated, to ensure the sustainability and future success of the RDA.

Concurrent with the Consolidation effort, the environment in which the RDA is operating is rapidly changing. At one end of the spectrum, COVID-19 creates an uncertain landscape,

challenging nearly every organisation in the world. At the other end, the Data Together⁴ initiative, that brings together four international data organisations (the RDA, World Data System (WDS), CODATA and GO FAIR), offers new opportunities to work together more effectively across the global ecosystem, and create a bigger impact.

All of these developments call for a new strategic vision for the organisation. This vision highlights the direction and priorities that will enable RDA to turn the challenges into opportunities, and to ultimately place the organisation firmly in a leadership role.

1.3. Achievements from the last Strategic Phase

1.3.1. Sustainability and Global Presence

At the time of drafting this Strategy, the RDA boasts over 11,000 members from 145 countries across the world, executing work through over 100 Working or Interest Groups, underlining its truly global presence and reach. The financial commitments from the three main funders (Australia, Europe and US), continue to be maintained, and activities to expand financial commitments have been an important focus of this phase (i.e., regional engagement and the Funders Forum). While financial support has not grown proportionately to the RDA community growth rate, RDA has demonstrated that it is still able to expand and operate under these complex financial conditions. In addition to these achievements, considerable effort has been invested to support Organisational and Affiliate Members, find alternative sources of funding, as well as identify and define areas of collaboration and cooperation through joint statements and activities with international initiatives of relevance and pertinence to the community.

1.3.2. Growth Management

The RDA as an organisation has been growing since its inception. Growth has been viewed to date as positive because RDA aims for global outputs with global adoption, which is most likely to be achieved by working at scale across the globe. For stakeholders / members / funders the impact of their commitment is greater as the RDA grows. The RDA has been growing on a number of different dimensions: actual Members, active Members, Organisational Members, active Groups, outputs, output adoptions, etc. Each of these areas of growth brings with them their own unique challenges and require their own response. The RDA also recognises that the main elements of the initiative (governance and membership) are interlocking and co-evolving, and therefore it is not possible to focus on solution elements in isolation. The governance and operational bodies have responded dynamically to these challenges through operational support changes for the community. Furthermore, the formalisation of more recent governance developments (e.g., Regions), and the development of a new category of activity within the RDA, Communities of Practice (CoPs), are designed to support the maturity and growth of certain communities within the membership.

⁴ <https://www.rd-alliance.org/news-media/joint-statements>

1.3.3. Regional Framework

The design, development and dissemination of the Regional engagement framework⁵ has been an important achievement during this phase, offering regional representatives a formal way to engage with and support the RDA globally. Furthermore, the position of the RDA in Europe has been further strengthened by the RDA Europe national node programme, establishing representation of the RDA in European countries. The direct commitment of the French government to support RDA Global is an important first milestone and success of this pilot programme.

The RDA Funders Forum continues to be an important body supporting both the RDA operations, but also leveraging the community through the creation of a dedicated RDA Interest Group⁶ to facilitate interaction directly between funders and Members in areas of mutual interest.

1.3.4. Value Proposition

The RDA vision is that researchers and innovators openly share and re-use data across technologies, disciplines and countries to address the grand challenges of society. The RDA is recognised as the community driven network for the creation and development of open science and open research solutions. Emphasis on the promotion and dissemination of adoption stories, webinars on RDA Recommendations and outputs, regional activities (e.g., national nodes, ambassadors), and the delivery of standards through the development of Information and Communication Technologies (ICT) technical specifications, has increased the value and positioning of the RDA for many stakeholders. The RDA call to action to deliver open, global data sharing guidelines for COVID-19 data underlines the commitment of both the organisation and the community to the RDA vision and mission. This COVID-19 response demonstrates the feasibility of responding rapidly to stakeholders, particularly funders, but also all those highlighted in the “Value of RDA for”⁷ ... information packages including research performing organisations, infrastructure providers, funders, libraries, regions, and most importantly, data practitioners and researchers.

2. Organisational Identity of RDA

2.1 Unique Selling Points (USPs)

2.1.1. RDA as a Collaborative, Open, Global Platform

An overview of the global data landscape shows that there are many international players in the research data arena. One of the selling points of RDA is that it is an enabling organisation offering a global, open, neutral, community-driven, and independent forum serving multiple stakeholders (funders, policy- and decision-makers, regions, research performing organisations, infrastructure providers, libraries, students and early career researchers, data

⁵ <https://www.rd-alliance.org/groups/rda-regions>

⁶ <https://www.rd-alliance.org/groups/research-funders-and-stakeholders-open-research-and-data-management-policies-and-practices-ig>

⁷ <https://www.rd-alliance.org/get-involved/value-rda-you>

practitioners, industry and enterprise) and covering all scientific disciplines and research domains. RDA enables the cross fertilisation of best practices, knowledge and solutions across different communities and makes all its outputs open and available to all.

There are a wide range of functions provided by RDA's global platform, some of the key ones are described below.

- RDA provides a meeting place where *communities of data practitioners* exchange knowledge and experiences and work together to make research more effective and efficient by facilitating data sharing.
- RDA provides a meeting place for *funders*:
 - to exchange information and align policies on open data on a global level;
 - to meet the global data community to discuss needs and solutions (brokering/expert pool role);
 - to access high-quality, internationally aligned and endorsed data infrastructure building blocks.
- As a neutral global third-party organisation RDA is a strategic partner for *public administrators and legislators*:
 - to generate ideas that enable policymakers around the world to create research data policies and infrastructures with its expert pool of thousands of individual members;
 - to disseminate research data policies and trends, best practices, and standards into the researcher communities.
- As a neutral global third-party organisation, RDA is a strategic partner for *industry, regions, and research performing organisations*:
 - to seek, test, and implement solutions to data-related challenges as early adopters;
 - to partner in building the standards and protocols that work towards creating effective processes and infrastructure for their industry and organisation;
 - to build networks of expertise and influence as recognised leaders in data practices in their fields;
 - to leverage on RDA's problem solving and skill development capacities offering employees a platform to upskill, exchange knowledge and expand their professional networks.

2.1.2. RDA Quality Guarantee

Another of RDA's selling points is its strong **quality** guarantee, based on RDA's processes, peer review, diversity of review and contribution—which greatly increase the quality of outputs. In implementing this process, the RDA also presents an effective collaborative learning community, which facilitates a key aspect of sustainability by ensuring the continuation of a knowledgeable and cohesive cohort working together into the future.

With its community platform function and quality guarantee, the RDA enables its stakeholder groups to meet their needs and solve the challenges they face. Beyond this, RDA offers a framework with a broad mission and vision, while remaining in essence domain agnostic, and with that, clearly differentiates itself from other international players. Ultimately, what the RDA offers is a dynamic and lean structure, a global pool of data practitioners, with an ability and

agility to get things done. The RDA is more than a meeting place or a forum: it is a global platform by design, with open, neutral, global, and transparent working methods that allow organisations and individuals to discuss any issue of concern connected to the data lifecycle and data policy. RDA results, the knowledge gathered via participation, the implementation of RDA formal recommendations, and the global data practitioner network, secure the position that data driven research will remain open and will generate new solutions both within and between the segments.

The Unique Selling Point of RDA is that it is a GLOBAL OPEN PLATFORM by design.

2.2. Mission

RDA builds the social and technical bridges that enable open sharing and re-use of data.

This mission continues to be sound and valid to our community.

2.3. Vision

Researchers and innovators openly share and re-use data across technologies, disciplines and countries to address the grand challenges of society.

The current vision of RDA is defined in broad terms. It encompasses research as well as innovation and societal challenges. The vision also covers an expanded RDA that would get more involved with industry, that would embrace the data domain outside of research or that would put more focus on social sciences and data in the context of humanities/societal challenges, with a specific focus on the UN Sustainable Development Goals (SDGs⁸). It therefore seems that there is no urgent need to revise the RDA vision at this time.

2.4. Guiding Principles

RDA is built upon a set of six, fundamental [guiding principles](#):

- **Openness** – RDA community meetings and processes are open, and the deliverables of RDA Working Groups will be publicly disseminated.
- **Consensus** – The RDA moves forward by achieving consensus among its membership. RDA processes and procedures include appropriate mechanisms to resolve conflicts.
- **Inclusive** – The RDA seeks to ensure broad, balanced and inclusive representation of its membership and stakeholder communities.
- **Harmonization** – The RDA works to achieve harmonization across data standards, policies, technologies, infrastructure, and communities.
- **Community-driven** – The RDA is a public, community-driven body constituted of volunteer members and organisations, supported by the RDA Secretariat.

⁸ <https://www.un.org/development/desa/disabilities/envision2030.html>

- **Non-profit and Technology-neutral** - The RDA does not promote, endorse, or sell commercial products, technologies, or services and the development of open and reusable recommendations and outputs within the RDA is mandatory.

These constitute the basic principles of the organisation. These are behaviours and characteristics that are **valued** by the volunteers who form the RDA community and the members of the RDA governance bodies. Principles that are further **developed** through participation in the RDA endeavour, and **encoded** in RDA governance structures, culture, and operation.

The core values of RDA have proven to be a key instrument in defining policies and in determining position statements of RDA. All six of them are still valid, equally important and cherished by the RDA community. During the process of redefining value propositions and business models for RDA, due caution must be exercised to protect and endorse all of them. They are key elements of RDA culture and attractiveness and enable its capacity as a powerful forum.

3. New Challenges for the RDA

3.1 A Changing World

To say the world has changed over the course of 2020 would be an understatement of enormous proportions. The COVID-19 pandemic has changed every corner of the world, and every community, including RDA and the organisations and communities of practice that define its core. This uncertain landscape combined with the challenges RDA had been facing before the pandemic struck, present RDA with the most significant challenges and opportunities since its inception. The goal of the Consolidation Phase 2020-2023 is to highlight a direction and priorities that can enable RDA to turn these challenges into opportunities, ultimately strengthening the organisation as a leader in the open science / Research Data Management (RDM) ecosystem.

The pandemic has highlighted the fundamental challenge we all face in adopting an open science culture to further the research and innovation that benefits all citizens. One might have assumed that the public interest and the need to resolve the health crisis of COVID-19 infections worldwide would override any national, organisational, or personal interests of COVID-19 and related research activities. It seems that this is not the case: researchers have not universally embraced open science as the modus operandi, and in some respects, it would seem that traditional models (e.g., publish or perish) may simply be amplified by the crisis.

The challenge and the opportunity facing RDA is how to use its fundamental strengths (e.g., power of the community, strong international profile, role of Plenaries) to overcome the weaknesses (e.g., lack of secure funding, small core Secretariat, inability to hold face-to-face Plenaries) that are limiting continued growth and impact.

3.2 The Challenges of Growth

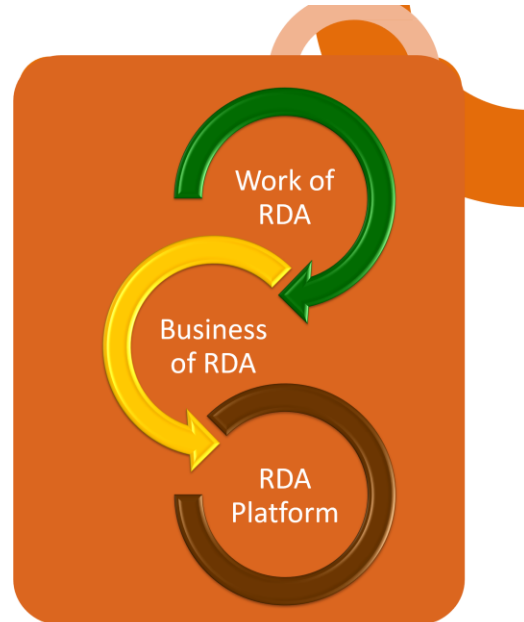
RDA's growth since the first meeting, in terms of individual, organisational and affiliate members as well as Working and Interest Groups, has been a testament to how effectively

RDA has filled a substantial gap in the community: the ability to galvanize a grassroots community around common goals and outcomes. There are numerous examples of domain-specific and multi-disciplinary communities that do this, but RDA is one of the few, if not the only one, that places the individual at the heart and therefore has succeeded in occupying this role in the RDM ecosystem.

Collaborative platform as a business model, based on two pillars:

The **Work of RDA** performed by the global volunteer community of data practitioners enables representation of all geographies, research domains, and professional cultures.

The **Business of RDA** is a lean and agile managerial layer, supporting governance and operations, and vital to securing the organisation’s sustainability.

This success must also be balanced with the impact it has had on the “Business of RDA”⁹: the core staff of the Secretariat, as well as RDA’s governance bodies, are continually challenged to meet the demands of a growing community, as well as a constant evolution in the complexity of maintaining RDA’s web site. That concept, RDA as a collaborative platform, is what drives RDA’s success, and finding ways to grow the capability and responsiveness of the platform is critical to our continued success.

Unfortunately, the lack of sustainable core funding has limited RDA’s organisational ability to grow along with the membership, and thereby provide the types of support that are needed to sustain and grow the activity of the membership. This is exacerbated by an older website as a key part of RDA’s platform, but one which can no longer be updated, and that is lacking in the types of effective collaborative tools the community has come to need and expect. Resolving this challenge is even more critical in the current COVID-19 context, where the possibility of physical meetings is considerably unlikely in the short term. Furthermore, the model around RDA plenary meetings will necessarily change to ensure facilitation of both physical and virtual participation simultaneously, which implies higher costs and increased staff efforts.

⁹ The Work of RDA: performed by the global volunteer community of data practitioners enables representation of all geographies, research domains, and professional cultures. The Business of RDA: a lean and agile managerial layer, vital to securing the organisation’s sustainability.

Such a change will require ensuring that any new collaborative web platform is able to meet the needs of a community of 11,000+ members, as well as transitioning a significant amount of existing content without disrupting the activities of RDA members.

Given this context, the key challenges for RDA include:

1. Support for the Business of RDA

- a. Lack of dedicated resources to ensure the business of RDA is supported, which encompasses all those components that the RDA offers to the community: staff, administration, communications, and collaboration tools (e.g. website).
- b. Project-based funding is an increasing percentage of RDA's budget, but this type of funding diminishes the ability for the core RDA team to focus on the business of RDA.
- c. Attention to meeting the legal/fiscal requirements of an international non-profit organisation compete with the same resources to undertake the business of RDA.

2. Support for the work of RDA

- a. Challenges of maximising member contributions.
- b. Fragile and insufficient resources for overseeing the efforts of a large grassroots community, with an increasing number of Working and Interest Groups and the necessary inclusion of a new group category in RDA: Communities of Practice.

3. Technical innovation

- a. Lack of an effective collaboration and communication system, including for the maintenance of outputs.
- b. Insufficient promotion and support of RDA outputs, minimising the impact of these outputs.

4. Leadership Role in the International Community

- a. Defining effective and long-term collaborations with other international data management organisations.

4. Strategic Goals

On the basis of the challenges and opportunities described above, in the next three years (2020 – 2023) RDA’s strategy will see a focus on People, Processes and Products. Each of these three “Ps” comes with an overarching strategic goal, and each is supported by a number of priorities.

The three overarching strategic goals and priorities are:

<p style="text-align: center;">PEOPLE</p> <p>GOAL: <i>to grow the RDA membership and facilitate engagement of the community, evolving to become truly global and diverse.</i></p> <p>PRIORITIES:</p> <ul style="list-style-type: none">● Building Communities of Practice;● Engaging with public and private sectors;● Building capacity in the Southern hemisphere.
<p style="text-align: center;">PROCESSES</p> <p>GOAL: <i>to bring to completion the processes that provide optimal and sustainable support to the RDA community.</i></p> <p>PRIORITIES:</p> <ul style="list-style-type: none">● Ensuring financial sustainability;● Increasing RDA professionalisation;● Optimising processes to support stakeholder relationships.
<p style="text-align: center;">PRODUCTS</p> <p>GOAL: <i>to improve RDA products in order to attract end-users in all sectors, over all regions, and including funders and researchers, responding to their needs and building on their active engagements.</i></p> <p>PRIORITIES:</p> <ul style="list-style-type: none">● Deploying the platform as a business model;● Enhancing web presence;● Maintaining Outputs and Recommendations.

4.1. PEOPLE

to grow the RDA membership and facilitate engagement of the community, evolving to become truly global and diverse.

This strategic goal will be supported by three main pillars: building Communities of Practice; engagement with public and private sectors; building capacity in the Southern hemisphere.

A key to a strategy in the People pillar is to find ways to engage and sustain engagement with RDA's community—not just the core 1,000+ that have been involved since the beginning, but all 11,000+ members, plus those that have not yet joined the RDA community.

While RDA has achieved substantial membership growth in a short time, the membership profile is largely one of the Northern hemisphere, which includes a significant component from Australia. Increasing membership in the Southern hemisphere must be central in RDA's strategy over the next few years, but this can only be done with a growth in RDA's platform and business support. Key strategies for the People Pillar are described below.

4.1.1. ***Build capacity in global areas where RDA is underrepresented (e.g., Southern hemisphere) to extend RDA's global presence and engage new professionals.*** While on the surface it seems reasonable to measure the impact of this strategy by the growth in the number of members in current underrepresented areas, there is also an opportunity to match the Open Science efforts of the RDA community with specific priorities in different countries. Building capacity in the areas we are underrepresented (e.g., Southern hemisphere) by:

- seeking members from underrepresented areas;
- encouraging greater participation in RDA Working Groups (WGs) and Interest Groups (IGs);
- encouraging and supporting training opportunities in regions;
- providing financial support for attendance at physical meetings (once these can resume).

4.1.2. ***Enhance and build engagement with members from the ECR (Early Career Researchers) and ECI (Early Career Infrastructure people) communities.*** Build ECR/ECI engagement by:

- developing a communications approach that addresses the language and concerns of early career and new professionals, and helps them see RDA as part of the solution;
- creating incentives for ECR / ECI members, including for Plenaries and engagement with groups.

4.1.3. ***Build Communities of Practice (CoPs) to achieve a more fulsome and integrated community, and cultivate the culture of RDA.*** The impact of this strategy will be to increase the diversity and geographic range of membership. Karen Payne from the WDS-ITO has done some interesting work to visualise RDA membership¹⁰, this and other tools could be used to track the change in RDA's "people profile", including country, domain, stakeholder group, and more. Build Communities of Practice (CoP) by:

- facilitating/supporting virtual meetings;
- creating a repository of case studies of domain-specific examples to enhance and build additional CoP;

¹⁰

<https://public.tableau.com/profile/littlehelper#!/vizhome/RDAMembershipWorldwide/RDAMembershipWorldwide>

- attracting and retaining newcomers (from all career stages and all organisations) from specific CoP and related domains;
 - encourage and support training events of interest to CoPs.
- 4.1.4. Formalize the engagement with Regions, and thereby increase regional partners and regional engagement.** Build Regional Representation by:
- promoting the Regional Framework in all areas where regions do not have a presence;
 - providing examples of best practices for regional governance and activities.
- 4.1.5. Increase engagement with industry, as well as public and private sectors to establish multilateral engagements that support the RDA community and align with strategic plans incorporating open data / science / infrastructures.** Build private and public sector engagement by:
- aligning public and private sector organisations with RDA's profile of Working and Interest Groups;
 - facilitating efforts that intersect with NGO/corporate interests, especially around specific standards;
 - defining a framework to facilitate support/funding from NGO/corporate partners for specific activities;
 - developing and growing opportunities for “sponsorship” of specific outputs;
 - considering private organisations, sector by sector, within existing and well recognized federations;
 - using the SDGs as a lens through which to focus the efforts of RDA groups and specific public and private sector partnerships.
- 4.1.6. Continue cultivating and nurturing the culture of the RDA by:**
- providing an engagement and collaboration platform that can overcome the challenge of no or limited physical meetings for the foreseeable future;
 - further articulating and promoting the RDA value statements.

4.2. PROCESSES

to bring to completion the processes that provide optimal and sustainable support to the RDA community

This strategic goal will be supported by three main pillars: financial sustainability, increased professionalisation of RDA; optimal processes to develop and maintain relationships with stakeholders.

4.2.1. Financial Sustainability

With more resources available for the organisation, RDA can increase and improve the support for the community and raise the quality of the RDA recommendations and outputs. It will also enable RDA to reflect the geographical and disciplinary coverage that is needed within the community. With financial sustainability, the RDA Foundation

would be able to facilitate a stronger and more effective effort, including greater support for the Secretariat. Currently, this funding is piecemeal and coming from different organisations, often accompanied with conditions or time constraints that can complicate its effectiveness. RDA needs to prioritise different funding streams.

4.2.1.1. **Pursue more relationship-driven funding to provide optimal sustainable support to the community and its products.**

Relationship-driven funding is that which does not involve project deliverables and provides a certain flexibility in spending. Investing in international relationships to secure funding is crucial, and leads to relationships such as that with Wellcome¹¹. Increasing regional engagement and building relationships are the first seeds that can lead to additional funding collaborations. Pursuing such opportunities may take time, but will significantly enhance RDA's sustainability. Over the last 18 months a dedicated effort has been made to ensure organisational sustainability in Europe, as is happening now in the US. However, RDA needs a broad range of relationships, including with the Southern hemisphere (see Section 4.1). From a process perspective, the task is to pursue, build and maintain relationships, with the overarching aim to create a more geographically balanced portfolio, without taking the existing relationships for granted or losing them.

4.2.1.2. **Increase the organisational membership of RDA.**

Currently the income from RDA Organisational Members is just under 20% of the total revenue. A sizable share of this income should be secured and increased, as this facilitates the spreading of financial risk and adds to the diversification of influences on the RDA governance structure. Both of these contribute to the strength and viability of the RDA as a whole. Because of the current pandemic, organisations might be facing budget cuts in the near future, so this revenue stream might be affected if no action is taken. The RDA COVID-19 initiative¹² should also create new opportunities assuming they are approached with targeted outreach.

4.2.1.3. **Respond to appropriate project funding opportunities where they correspond to existing RDA strategic goals.**

The priority for RDA will be to source core funds with no restrictions. Although project funding is not the optimal solution, it does provide a realistic opportunity and RDA has been successful in securing it in the past. Therefore, the strategy for the coming years will be to maintain this type of funding in the financial portfolio, but approach new opportunities with attention to the resource impact. Also, RDA should only respond to opportunities that, at least, partly align to the current goals, rather than pursuing all project funding opportunities.

4.2.1.4. **Miscellaneous funding opportunities: the funding portfolio is diverse enough at this point.**

Miscellaneous funding opportunities comprise corporate social responsibility, philanthropic funding, micro funding, consultancy fees, etc. Pursuit of these funding sources should not be prioritised due to the limited human resources currently available. RDA should instead focus on strengthening an already diverse funding portfolio.

¹¹ <https://wellcome.org/>

¹² <https://www.rd-alliance.org/value-rda-covid-19-0>

4.2.2. Increased Professionalisation of RDA

4.2.2.1. Professionalising relationships, and enhancing or establishing processes between global and regional areas, to achieve coherence and alignment.

The Regional Assembly (RA) and the Regional Advisory Board (RAB) will provide an opportunity to ensure the further professionalisation of the relationship between the global and regional offices. In some cases, legal entities have been created, but there are as yet no formal relationships or Memorandums of Understanding (MoUs) between the RDA Foundation and those regional entities. There are issues which may need clarification, such as the use of the RDA brand in regional contexts. Information should regularly be exchanged between RDA Global and the regional entities. Currently there is a very diverse mix of relationships, which may present reputational and other risks. The requirements are specified in the Regional Engagement Framework, and the focus in the short term should be implementing processes to execute and adhere to these requirements. RDA should create policies for emerging activities on a regional level (e.g. consultancy fee-based services).

4.2.2.2. Increasing the number of regional members with an objective to create a more geographically balanced organisation.

Regional grass-roots initiatives are crucial to the viability of the RDA as a whole. They are important in the context of the creation of a truly global organisation, but also as future possibilities to unlock regional funding.

4.2.2.3. Improving coordination among Working and Interest Groups.

Since its inception the RDA has seen a tremendous growth in the numbers of Working Groups and Interest Groups. With around a hundred groups there is a growing need for coordination among the Groups to avoid overlap and increase the efficiency and effectiveness of the community's work. The appointment of dedicated coordinators for different topics/domains is seen as one of the possible solutions to this issue, but there may be others. However, since the resource implications of supporting these dedicated coordinators have not yet been scoped, this will need to be approached with caution.

4.2.3. Optimal Processes to Develop and Maintain Relationships with Stakeholders

4.2.3.1. Facilitating agile responses to evolving data challenges.

The RDA would like to engage more strategically with stakeholders to identify topics or opportunities that meet the needs of stakeholders, as well as to create more opportunities for the organisation itself. The recent RDA COVID-19 initiative in response to a call from the European Commission clearly demonstrates that such opportunities exist. RDA needs to develop a mechanism to more effectively monitor the opportunities for strategic problem-solving based on the needs of the stakeholders, and to detect when it is appropriate for RDA to engage.

4.2.3.2. Raising the strategic value of RDA Plenary Meetings.

The strategic value of RDA Plenaries (the value in terms of developing relationships, funding, progressing RDA goals, etc.) can be further increased through the improvement of organisational processes. RDA has a responsibility to create a maximum strategic return on the considerable investment made by the organisation and its members. Plenary operations are a shared

responsibility of RDA Global and the local hosts, and the strategic value of Plenaries for both parties needs to be an important element in the evaluation of bids.

4.3. PRODUCTS

to improve RDA products in order to attract end-users in all sectors, over all regions, and including funders and researchers, responding to their needs and building on their active engagement.

This strategic priority aims to address the evolving nature of RDA in terms of added value to the community as well as the wider public, and will be supported by three main pillars: platform as a business model; web presence; and outputs and recommendations. Since its inception phase, when RDA first created products (e.g., Recommendation and Outputs), RDA itself has become a product due to the particular workflows it implemented to create those products. This value could be better recognised through active endorsement of the RDA brand by stakeholders, as well as positioning the RDA in the context of significant societal endeavours such as the SDGs, or the fight against climate change. In doing so, it is important that the RDA's quality guarantee is not diminished.

RDA products are critically important to facilitate a significant change in research, to the adoption of new ways of collaborating, and thereby creating new paths to new discoveries. To satisfy the growing demand for RDA products by existing and new users, while responding to new demand in this fast-changing sector, the RDA must challenge itself on how to “renovate and innovate” around its products. The impact of refreshed RDA outputs and recommendations with appropriate SDG labels, along with a well-structured registry, and a new communications and collaboration platform, will make the RDA brand more viable and globally respected for the decade to come.

4.3.1. **Collaborative Platform as a Business Model**

The RDA organisational mode follows the Collaborative platform as a business model, based on two pillars:

1. *The Work of RDA* provides unique opportunities for all stakeholders to share knowledge—across disciplines, and at a global scale. The professional oversight and quality guarantee of RDA's work is facilitated by an open and transparent process (e.g., the election of WG and IG chairs, and TAB members), and one which enables representation of all geographies, research domains, and professional cultures.
2. *The Business of RDA* is a lean and agile managerial layer, which is vital to securing the organisation's sustainability. This effort is managed by the Secretary General, along with a team of directly employed staff as well as in kind staff contributions from the different regions. The RDA Council provides strategic oversight, including the

strategic plan, and approves and audits the yearly work plan, which is carried out by the Secretariat. The overhead cost is typically low in platform-based or virtual organisations, and this is particularly true for RDA. The great added value of the model is its flexibility, continuous circulation of ideas, consensus building, and the lack of direct influence typical of a top-down model.

4.3.1.1. Keeping the RDA business model and securing its operation by balancing the two pillars, and motivating the volunteers and the staff.

RDA is a lean organisation and most of the work is done by volunteers, and as that base grows the already very low ratio represented by the business layer needs attention. The best way to tackle the problem is to maintain existing, and attract new, funders and organisations. The realities of the COVID-19 pandemic introduce more challenges to this balance, and while it also introduces opportunities, the RDA has limited flexibility to absorb increased pressure.

4.3.1.2. Providing a unique platform for funders, and all stakeholders.

The RDA Plenary in general, and the Funders Forum in particular, provides a unique place for funders and policymakers to meet with each other around common interests, but also to have regular informal contact with researchers and other stakeholders. There is a huge added value to discuss the issues of common concern and shape the directions, together with the organisations and the researchers, before regional decisions.

4.3.1.3. Offering the opportunity for regular meetings for data-focused global and regional initiatives.

The facilitation of global plenary meetings coupled with regional or national level RDA events, allows the existing community to advance work while allowing new and aspiring members to understand how RDA benefits them and how to get actively engaged.

4.3.1.4. Building on the Data Together¹³ initiative by inviting other global data projects to the conversation.

RDA Plenaries present an ideal opportunity to discuss common issues with partner organisations, thereby maintaining and enhancing the cooperation articulated in the Data Together vision.

4.3.1.5. Building fora for the action around the “Regional Commons”.

As RDA builds on the Regional Engagement Framework, it provides a natural context to further effect knowledge transfer and collaboration along domain- or project-specific lines. It is great added value for all. The RDA Global Open Research Commons (GORC) IG is an example of an occasion where RDA can provide a neutral platform to exchange views around the global open research challenges.

4.3.1.6. Turning greater attention to the Southern hemisphere.

RDA is a global organisation, and RDA’s outputs are beneficial for all stakeholders and regions—however, there is a gap in RDA’s presence across all the regions that limits growth and effective collaboration. RDA should actively look for funders and donors to stimulate regional engagement in Africa, Asia and Latin America.

¹³ <https://www.rd-alliance.org/news-media/joint-statements>

4.3.2. Web Presence

The RDA has a strong web presence that is the primary entry point for all members and visitors, including special sub-sections for the European Union and for the United States. The RDA website, together with its Zenodo collection, is also a repository of RDA Outputs / Recommendations at various stages in their development. The growth in members, Groups, and outputs leads to associated complexity that may not be best served with the current deployment of web resources and tools.

4.3.2.1. Modernising our web site

The RDA needs to embark on a detailed process to understand its needs when it comes to both the communication aspects of its Work and Business, as well as the collaboration needs to most effectively serve as a platform for thousands of members. This will require among other things, a website that is more user friendly, accurate, and conducive to promoting and preserving the content generated by members. It will also be important in specific circumstances to provide secure access to all content from all regions while respecting privacy.

4.3.2.2. Developing custom websites for all Regions.

As noted previously RDA provides several regions with a local presence, but this is not present for all regions, including Africa and Latin America. The content of regional websites should be built together with local RDA members to ensure that they address the interests of local researchers.

4.3.2.3. Developing a Global Policy Observatory.

Global RDM efforts are increasing their investment in infrastructure and services in response to the transition to Open Science policy frameworks. RDA is in a position to add value by complementing the technical platforms and standards with similar detail at the policy level. This would not only generate substantial knowledge transfer of policy across all regions, but would also grow RDA's community of policymakers and associated stakeholders.

4.3.3. Outputs and Recommendations

The RDA Outputs¹⁴ are the bricks for a strong data sharing foundation, one that can be used to build a bridge to solutions for society's greatest challenges. The process of creating and maintaining outputs throughout their lifecycle requires not only a substantial response from the community, but also a significant level of support from the RDA. This is often compounded by the fact that outputs can take a number of forms, from textual recommendations and guidelines, to Application Programming Interfaces (APIs) and operational software services. Also, while RDA has clear rules and practices from the inception of an idea until the publication of outputs, this is not the same for dissemination and maintenance (including the eventual removal of an outdated output). As this work requires significant investment, RDA needs to

¹⁴ RDA Outputs are products of the respective RDA Working or Interest Group and should be demonstrably developed and endorsed by the group. RDA Outputs have the following classifications: RDA Recommendations (produced by WGs and endorsed by RDA community and governance), Supporting Outputs (produced by WGs and IGs and subject to RDA community review), and Other Outputs (produced by WGs and IGs no endorsement or community review). <https://www.rd-alliance.org/recommendations-outputs>

develop a similar quality guarantee for this later stage in the process. Some possible approaches include:

1. identifying a set of outputs where RDA wishes to disseminate the results exclusively, or alternatively, where this could or should be done with other organisations;
2. developing a clear and sustainable approach to ensure the quality guarantee;
3. ensuring that the RDA brand remains strong and visible at all stages of the process, including the adoption or implementation of outputs by stakeholders.

Given the rapidly evolving nature of the data ecosystem, it is important for the RDA to maintain an updated registry of all RDA Outputs to ensure effective access by all stakeholders and domains of practice. The approach to the dissemination and maintenance of outputs will vary widely, from the normal single-output recommendations (i.e., PDF format), to others requiring substantial further investment to achieve the desired form for adoption (e.g., ICT specifications, technical specifications, pilot platforms).

Since the work of the RDA is manifested through WGs and IGs under the professional oversight of the TAB, the RDA Council will need to work with TAB, and other RDA bodies, to develop and deploy a roadmap for the continued development and dissemination of RDA outputs.

4.3.3.1. Introducing a user-friendly registry for all RDA products.

RDA outputs are high-value products, and provide great added value for end users. With the growing number of recommendations and outputs produced by RDA groups, and with the growing membership, there is a need for a new approach to a registry of RDA products.

4.3.3.2. Maintaining the current level of quality assurance for RDA outputs.

RDA recommendations, typically made by WGs with the oversight of the TAB, are at the core of RDA's quality guarantee. With the growing number and complexity of these outputs, maintenance is a challenge for a process that reflects a largely volunteer supported effort, with some support from the Secretariat. The RDA should continue to develop the details of this process, including a clear path (where appropriate) to facilitate their translation to standards, or equivalent forms, in the regions.

4.3.3.3. Developing a proactive dissemination and maintenance strategy, including tailor-made solutions for specific regions.

The RDA recommendations are seeing substantial adoption and use after their publication; however, there is an opportunity to meet what is assumed to be an even greater demand with a more robust and localised dissemination strategy. Dissemination is often connected to geography or domains of practice, and better communication and/or tailor-made solutions would facilitate this effort. The determination of impact, whether an RDA output, or a traditional scholarly publication, is challenging given the open nature of the research ecosystem. Many of RDA's outputs are intended to facilitate the measurement or analysis of the impact of research outputs, which presents an opportunity for the RDA to use its own community outputs to measure its impact on the broader stakeholder community.

4.3.3.4. Developing a clear process for updating outputs.

As a result of the fast-changing nature of research and the associated best practices, it is necessary to periodically update RDA's outputs with new versions. The RDA needs to develop a clear process for the associated WGs and IGs to determine when versioning is needed, how best to develop new versions, and how to effectively disseminate those revised outputs.

4.3.3.5. Identifying new types of outputs.

The RDA community can generate ancillary, or "side products" as part of the process of creating primary outputs. As the landscape changes, stakeholder's interests evolve, and new technologies arise, the RDA must consider opportunities to evolve its own outputs to reflect these changes. These developments must also be integrated into the dissemination and maintenance strategy, and reflected by enhancements to the central registry of RDA's outputs.

4.3.4. Sustainable Development Goals (SDGs)

Many countries, organisations, and individuals would recognise that the SDGs can provide a comprehensive and multifaceted lens through which to view the grand challenges facing society: the fight to respond to the impacts of climate change represents a central lens or prism in this matrix. And while the view through the lenses of the SDGs can be coloured by national, institutional and personal biases, these do not diminish the value of the SDGs as a path to working towards a better future. The work of RDA has the potential to add substantial value to conversations such as the climate change effort, by enabling cooperation between sectors and regions in the service of the SDGs. However, RDA added value is often too abstract and is not well recognised by members, or by the organisations that would most benefit from these solutions. The RDA should ensure that its brand clearly reflects this commitment to the SDGs, and RDA's WGs and IGs, and their associated recommendations and outputs, are clearly labelled to highlight intersections with the SDGs.

4.3.4.1. Increasing awareness of, and identifying RDA's contribution to, the SDGs, with the active participation of all RDA governance bodies.

- Develop an approach to identifying one or more of the SDGs as a criterion for new group endorsements;
- Undertake a retroactive review of existing groups with the goal of labelling all groups with their relevant SDGs contributions;
- As part of the process for a sustainable approach to the updating and maintenance of RDA's outputs, revisit all existing outputs and recommendations to highlight their intersection with the SDGs;
- Develop an approach for CoPs to frame their work in the context of the SDGs.

4.3.4.2. Building SDGs into RDA brand/outputs

- Emphasize SDGs in the themes of the Plenaries and regional conferences;
- Increase awareness of SDGs through the RDA leadership;
- Promote the work of RDA towards funders and the leading SDG stakeholders;
- Attract new members and organisations via RDA added value to SDGs.

4.3.5. Carbon Footprint

Like all organisations in the current context of a climate change challenge, the RDA needs to take substantial action to reduce its carbon footprint. For the last few years, the RDA has been discussing options for those activities (such as the Plenaries) that can contribute substantially to that footprint, and the current COVID-19 crisis has amplified that need, but also provided an opportunity to act. To strengthen this, in the future we wish to pursue two main priorities.

4.3.5.1. Understanding and promoting this commitment and the associated values throughout the organisation.

Through active discussion and engagement at all governing bodies, and across all Groups and membership, RDA will communicate the challenge and the response of its actions in this context.

4.3.5.2. Building a proactive approach to RDA's carbon footprint management, and implementing this gradually across RDA's operations.

As part of its operational planning, the RDA will establish a suite of actions to reduce its carbon footprint, and report back to the community in the impact of these actions. For example, the RDA Plenaries have the largest impact on RDA's carbon footprint. It is proposed that the carbon footprints of the previous Plenaries be calculated, and compared to the same for future virtual, hybrid, and regional variations of the Plenaries.

5. Implementation

The implementation of this strategic plan is of crucial importance for both the RDA as an organisation, as well as for the broader RDA community. It will be the foundation of the much-needed consolidation of earlier achievements as well as the starting point for many important improvements and new and exciting initiatives.

To facilitate the execution of the strategic plan and the monitoring of progress, a separate internal implementation plan is managed by the operational bodies. This plan clearly outlines the activities, deliverables and actors associated with the different strategic priorities. The implementation plan includes a time schedule as well as a definition of Key Performance Indicators (KPIs).

The RDA team will also develop a dynamic reporting framework through which it will communicate to the full RDA community on these efforts, the outcomes, their impacts, and proposed next steps. This reporting framework will be updated on a quarterly basis, and will include a mechanism for the RDA stakeholder community to provide additional feedback.

The implementation of the ambitions laid out in this document is a shared responsibility of the RDA bodies as well as its global community. Together, and driven by the core values of the organisation, we will be successful in creating new opportunities and further strengthen RDA as a powerful and influential global forum.