

## Discussion paper on Mission-oriented Research

In the context of global Grand Challenges and the UN Sustainable Development Goals

### Introduction

Mission-orientated research funding is growing in prevalence in many national and international contexts. These frequently place emphasis on creating change in – or impact on – society ambitions which are best realised in collaboration and consultation with societal actors.

Mission-oriented research seek to provide a systemic approach towards achieving a specific goal, using solution-based, outcome-oriented approach. ‘Big science deployed to meet big problems’. Such a model for designing and implementing research initiatives is increasingly seen as a model that can harness the capabilities and interest of the global research community, to work together towards an agreed and evidence-based set of end-points, or ‘missions’.

A focus on mission-oriented research funding is linked to the objective of positioning science granting councils in closer proximity to global science policymaking through how research agendas are set and prioritised by GRC participating organisations to support these global policy frameworks.

It is also linked to the importance of justifying the use of public funds to support research and innovation that addresses the socio-political, economic and sustainability questions; and the use of strategic partnerships and internationalisation to support collaborative research efforts, which must inform the implementation of these policy frameworks.

There are a wide range of global ‘grand challenges’ where a mission-oriented research would provide an appropriate approach. These include exploiting new technologies, materials, and understandings – such as artificial intelligence and quantum technologies – to stimulate the next industrial revolution; and harnessing big data to provide a data-driven understanding and organisation of an increasingly connected global community.

It is also crucial that these missions are designed to ensure the economic and social development of the world’s population, as well as provide an effective response to the major challenges facing the world today, such as climate change, growing inequalities, and urbanisation.

To that end – and building on the momentum of previous discussions and ambitions within the GRC’s participants – the United Nations’ Sustainable Development Goals (SDGs), provide one example of a framework for developing and refining such missions around a common set of overarching objectives to achieve a better and more sustainable future for all, and ensuring such missions effectively respond to the global challenges we face. The SDGs, initially launched in

2015, also underpin the UN's broader 2030 Agenda for Sustainable Development, which covers a wide range of interrelated goals, including poverty eradication and economic growth, social inclusion, environmental sustainability and peace for all people by 2030.

The impact of such a solution-based approach towards advancing the attainment of the SDGs – and its adoption by the international research community - has the potential to be both far reaching and transformative in how we understand and address today's global challenges.

## Background

In September 2019, the [United Nations held its first Sustainable Development Goal Summit](#) since the adoption of the 2030 Agenda in 2015. The summit brought together Heads of State and Government to comprehensively review progress in the implementation of the 2030 Agenda and the 17 SDGs. The political declaration entitled '*Gearing Up for a Decade of Action and Delivery for Sustainable Development*' proposed the launching of a more ambitious and accelerated response to reach the 2030 Agenda, with a pledge to make the coming decade one of action and delivery.

While recognising many of the efforts since 2015, including the response from academia, the declaration noted that progress has been slow in many areas. Vulnerabilities and deprivation have become more entrenched, and assessments have showed that there is a risk of missing the poverty eradication target. Inequalities in wealth, incomes and opportunities have been increasing in many countries. Biodiversity loss and green-house gas emissions have continued at rates that could bring disastrous consequences for humanity. Global health threats, more frequent and intense natural disasters, spiralling conflict, violent extremism, terrorism and the related humanitarian crisis and forced displacement of people, threaten to reverse much of the development progress in recent decades.

The declaration recognised the specific challenges and vulnerabilities faced by African countries, least developed countries, landlocked developing countries, small island developing states and countries in conflict and post-conflict situations in pursuing sustainable development.

Therefore, as part of the decade of action and delivery, the declaration committed to solving challenges through international cooperation and enhancing global partnerships. It also committed to investing in data for SDGs, encouraging international cooperation to support the most vulnerable countries who face the greatest challenges in generating data and statistics.

**Specifically, and of most relevance to GRC participants, it commits to harnessing science, technology and innovation with a greater focus on digital transformation for sustainable development. It states *'we will promote research, capacity-building initiatives, innovation and technologies towards advancing the SDGs and promote the use of scientific evidence from all fields to enable the transformation to sustainable development. We will foster international cooperation to support developing countries in addressing their constraints in access to technologies'*.**

Looking further than the SDG's, [AGENDA 2063](#) is the African Union's blueprint for delivery of inclusive and sustainable development. Agenda 2063 envisages a long-term 50-year development trajectory for Africa that is able to adapt in response to ongoing structural transformations; increased peace and reduction in the number of conflicts; renewed economic growth and social progress. The Priority Areas of Agenda 2063 can be linked to all 17 UN SDGs.

The Science, Technology and Innovation Strategy for Africa (STISA 2024) places science, technology and innovation at the epicentre of Africa's socio-economic development and growth. It is anchored on six distinct priority areas that contribute to the achievement of the Agenda 2063 Vision. These priority areas are: Eradication of Hunger and Achieving Food Security; Prevention and Control of Diseases; Communication (Physical and Intellectual Mobility); Protection of our Space; Live-Together-Build the Society; and Wealth Creation.

STISA 2024 further defines four mutually reinforcing pillars which are prerequisite conditions for its success: building and/or upgrading research infrastructures; enhancing professional and technical competencies; promoting entrepreneurship and innovation; and providing an enabling environment for STI development in the Africa continent. The Strategy recognises the importance of international cooperation and therefore promotes mutually beneficial South-South and North-South cooperation.

## **Research and innovation to address global Grand Challenges**

Policy decisions on mission-oriented research to meet today's grand challenges need to be informed by policy-relevant evidence co-designed and co-produced with the pertinent stakeholders, taking into consideration local and political contexts.

Universities and researchers are well placed to play a leading role in the cross-sectoral effort needed to address the grand challenges, providing valuable expertise, but also as they are considered as neutral, trusted and influential players by stakeholders and the public at large. Worldwide, such stakeholders have already begun to address these challenges, encouraged by initiatives of the United Nations, the not-for-profit sector, as well as national and international research and innovation funders.

The global research community potentially has the capacity and capability to generate, translate and disseminate knowledge relevant to achieving the grand challenges, working with policy-makers and other stakeholders to identify policy priorities/ problems, assess options, implement solutions and evaluate their effectiveness, and translating the specific challenges, such as the SDGs, into measurable and country specific targets.

However, while researchers already foster partnerships with international colleagues, government and local communities, in order to achieve scientific and societal impact, these interactions can often be ad-hoc, short-lived (e.g. for a project) or unsustainable. Longer-term and sustainable strategic partnerships are therefore needed to address these grand challenges, but this is non-trivial and requires more long-term investment and maintenance.

A significant challenge remains as to how researchers, especially those in low- and middle-income countries, can play a proactive and leading role in addressing grand challenges. These countries are often grappling with the challenges of expanding research capacity and fostering quality, while striving to maintain equitable access and relevance to the economy and to policy making. In many instances, governments are not aware of the large and relevant knowledge base and expertise potentially available to them, and researchers do not always perceive governments as partners for their knowledge. Consequently, the potential of each partner is not being harnessed to the fullest.

## Mission-orientated research and the SDGs

The SDGs themselves are too broad to be achieved through funding any one research project, in one grant cycle by one agency. Conversely, research projects will remain isolated in their impacts if funders are not clearly linking projects to their ability to contribute to an SDG and sharing that information. Therefore, in order to harness the power of research and innovation to address the SDGs transformative approaches are required.

Mission-oriented research is an approach which can be used to inject urgency into the development of solutions for societal challenges like climate change, as well as the provision of global public goods, such as clean drinking water, public education and public health services. The goal of a mission is to be ambitious, aim high, be innovative and move fast. The European Commission, for example, views research missions as a link between broad challenges and concrete projects. Missions set clear and ambitious objectives that can only be achieved by a portfolio of research projects with supportive measures, such as policy interventions, and involvement of all stakeholders and users of research.

There are a number of key characteristics of mission-oriented approaches, which can be summarised as:

- **The diffusion of results** is a central goal and is actively encouraged
- The mission is defined in terms of **economically feasible technical solutions** to particular societal problems
- The direction of technical change is **influenced by a wide range of actors** including Government, private firms and consumer groups
- **Decentralised control** with a large number of agents involved
- Emphasis on the **development of both radical and incremental innovations** in order to permit a large number of firms to participate
- **Complementary policies** vital for success and close attention is paid to coherence with other goals
- Missions should be well defined. More granular definition of the technological challenge facilitates the establishment of intermediate goals and deliverables, and processes of monitoring and accountability.

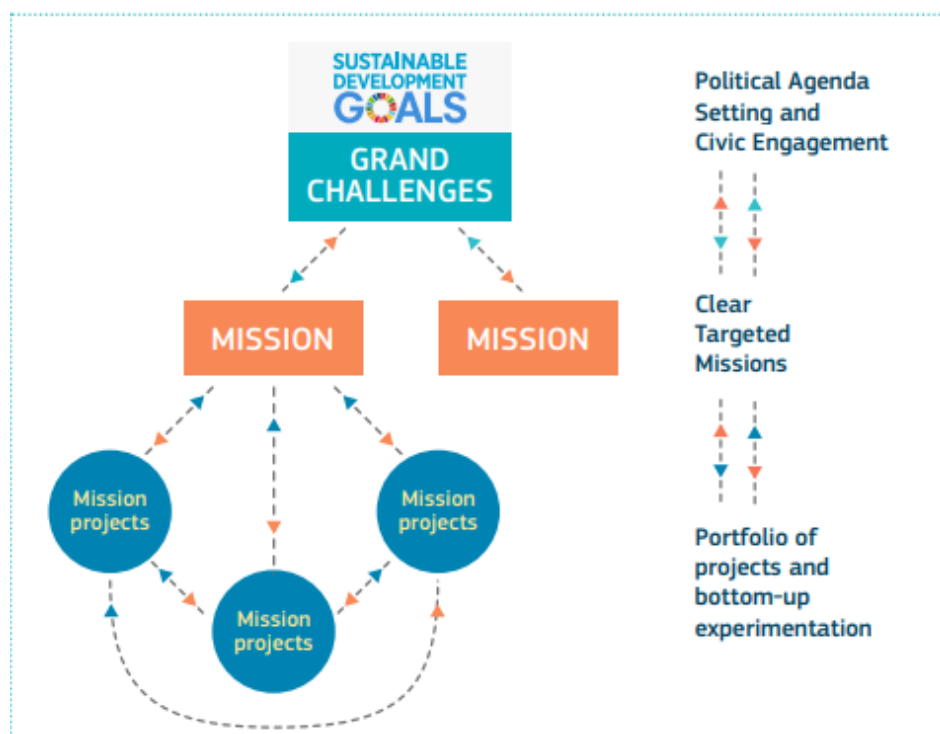
Mariana Mazzucato – Special Advisor to the European Commission’s Commissioner for Research, Science and Innovation, Carlos Moedas – states that “Missions should be broad

enough to engage the public and attract cross-sectoral investment; and remain focussed enough to involve industry and achieve measurable success. By setting the direction for a solution, missions do not specify how to achieve success. Rather, they stimulate the development of a range of different solutions to achieve the objective.”

With this definition, mission-orientated research approaches could be used to make an important contribution to addressing today’s grand challenges, and specifically the UN’s SDGs.

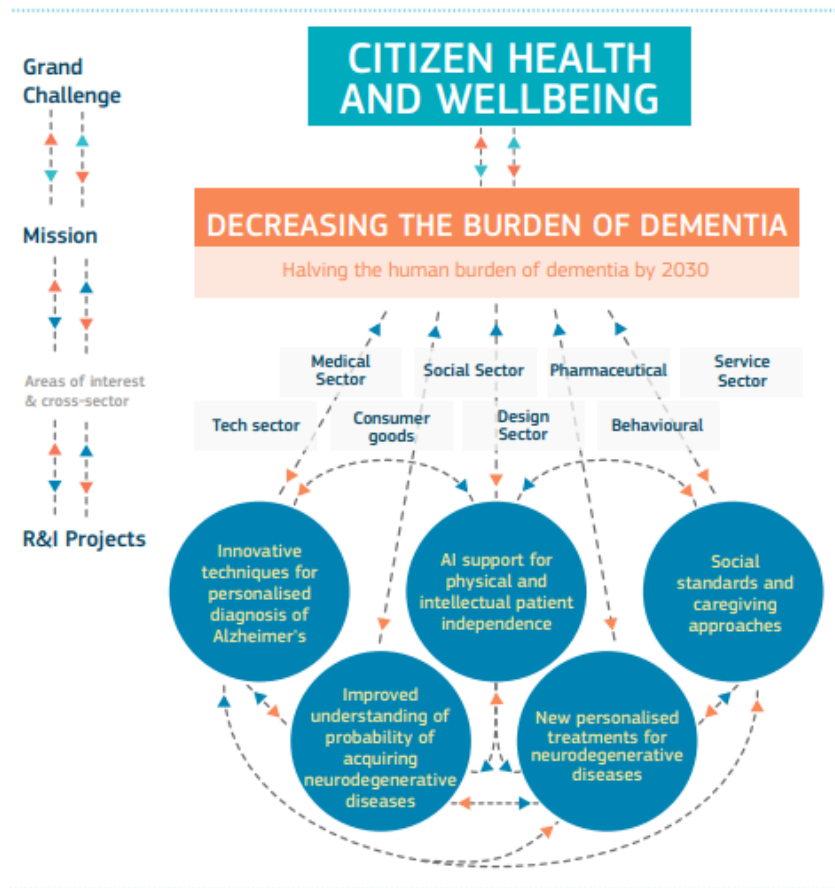
As illustrated in figure 1, Mazzucato’s vision for the SDGs is that they will form grand challenges which can be broken down into various missions, and further broken down into particular ‘projects’ as demonstrated in figure 2.

Figure 1 below illustrates Mazzucato’s vision of the movement from broad challenges to specific missions.



Taken from Mazzucato, 2018

Figure 2 – example of how SDG can be broken down into ‘Missions’ and ‘Projects’



Taken from Mazzucato 2018

Missions must also enable bottom-up solutions and experimentation, as well as stimulating cross-discipline academic work, with a strong focus on the intersection between the natural sciences, formal sciences, social sciences and humanities.

The trajectory taken to reach a mission will not follow a single, linear path and iterative learning across projects and funders should be part of the process. Missions therefore need a timeframe which enables this engagement, learning and impact, while at the same time having a delivery date. Crucially, it must be possible to say definitively whether the mission has been achieved or not.

## Approaches to identifying missions

Missions should be determined through a fine-tuned participatory diagnosis of a problem, including the potential solutions available. Who decides the mission is therefore a key issue.

The selection of missions should also incite broad public engagement, as well as a wide interest from broader stakeholders in the civil, not-for-profit, and business sectors. This will in turn spur further political and financial commitment.

Through such participatory dialogue, the selection of co-designed missions should also fulfil the following criteria:

- Missions should engage the public. To do this, missions must outline exciting opportunities for bold and inspirational research and innovation, whilst aligning with broader social and developmental agendas and goals.
- Missions need to be very clearly framed, with a clear direction which is targeted, measurable and time-bound.
- Mission objectives should be ambitious, but realistic research and innovation actions.
- Missions should be framed in such a way as to spark activity across, and among, multiple scientific disciplines (including the social sciences and humanities), across different industrial sectors, and different types of actors.
- Missions should not be achievable by a single development plan, but rather should be open to being addressed by different types of solution, with a clear expected outcome.
- Missions should also engage as much as possible with regional- and country-level strategies, in order to help guide research and innovation initiatives across multiple actors and sectors.
- Acknowledging and incorporating national- and regional-level comparative advantages in particular scientific domains, such as Chile's geographical and climatic strengths in supporting astronomical observator (see *Case Study*), to ensure appropriate expertise and capabilities are fully utilised in the attainment of missions, as well as sufficient buy-in from local stakeholders is present.

## Benefits and challenges of mission orientated approach to research

There are a **number of benefits** in adopting a mission-oriented approach to research framed around the SDGs or other grand challenges.

Such research has the potential to generate more immediate and visible impact on society and the economy. Highlighting potential impacts at the proposal stage will encourage researchers to think about how their research will benefit society and the economy. In turn, researchers may become aware earlier of how their research could be translated into application.

Earlier engagement with relevant societal stakeholders will also improve the researchers' understanding of what is relevant and of interest to stakeholders and thus shape both the research questions and ultimately the research results towards more immediate impact. In return, societal

stakeholders might show more interest in and understanding of the research outcome than can usually be expected from post-research communication.

Moreover, such initiatives can also assist research funding organisations as an advocacy tool in budget negotiations. At the same time, it will help political decision-makers to better justify research expenses to society.

Coupled with these benefits, there are **a number of challenges** associated with mission-oriented research, that should be acknowledged and – where possible – mitigated, in order to maximise the benefit and inclusivity of such approaches.

Primarily, ensuring an appropriate balance between the affirmation of scientific excellence as the primary evaluation criteria for use-oriented research, against the potential societal and economic impact of research in effectively addressing grand challenges, is crucial. This includes the recognition that one way to ensure this could be to separate evaluation procedures for excellence and impact.

Caution should also be exercised when using societal and economic impact as funding criteria for curiosity-driven research. Such impact is often unexpected, unintended and materialises much later. Societal or economic impact assessment, which can take both these uncertainties as well as the long term nature of impact into account, still need to be further developed and refined. In 2019, the GRC endorsed at its Annual Meeting a *Statement of Principles on Addressing Expectations of Societal and Economic Impact*. The Statement called for research to ‘address the increased expectations of societal and economic impact’, whilst highlighting ‘the value of both investing in research that advances and transcends the boundaries of knowledge as well as supporting research that may deliver more immediate and measurable societal and economic impact.

## **The need for international cooperation on mission-oriented research**

The challenges facing today’s world are intrinsically global in nature, and therefore require global responses to help mitigate their consequences. Development challenges also cross borders, regions and continents, and are often invariably linked to wider global challenges, such as climate change. The solutions to these challenges therefore must also transcend national boundaries. 193 countries have signed up to the SDGs, for example; and as such they provide a common framework for engagement across a range of funders, countries and governments.

Research specifically targeting these challenges – from effectively identifying the problem to developing and implementing an appropriate pathway for their resolution – is crucial to addressing these challenges. Whilst modern research partnerships are increasingly international, they are often bilateral, and sometimes even multinational, but rarely on the supranational scale needed to address inherently global issues such as climate change, with the Belmont Forum offering an almost unique example of such scale in approach towards global challenges being achieved effectively. As research funding organisations, we can provide the global researcher community with the tools and wider support to effectively address these challenges through international research activities.



Researchers can rapidly and effectively work across borders in a way that many policy makers are unable to achieve. Researchers are also less restricted than policy makers in what they can say publicly and are therefore well placed to highlight concerns or priorities that policymakers may feel unable to actively promote. It is paramount therefore to bridge the divide between researchers conducting these missions, and the policy-makers who will direct how the outcomes and benefits of the research are realised. Influencing decision-makers will require a concerted approach under one unified voice from the research community.

Such a framework of support by research funding bodies will help support researchers to connect and collaborate internationally, access new knowledge produced outside of their current research communities and join forces to address global challenges under a unified mission-oriented approach.

## **Building momentum towards an international approach for mission-oriented research on SDGs**

Whilst collaborative approaches towards mission-oriented research and grand challenges have been discussed and tested in various forms in recent years, there is an increasing interest from the research funding community to combine these approaches with a coherent plan for addressing the SDGs through mission-oriented research.

Previous discussions and initiatives, such as the recently held GRC pre-meeting event, [International Science Council and the US National Academy of Sciences Global Forum of Funders Forum](#) and a Research Council of Norway (RCN)/ OECD CSTP workshop on Global Public Goods, have identified a number of priorities to achieve this, including the need for:

- Greater collaboration among science funders and the research community to address the world's most pressing challenges, as exemplified by the SDGs;
- More effective cooperation and coordination between national research funding agencies – including development research funders – to achieve coherence and impact in developing and emerging countries and communities receiving Official Development Assistance (ODA) funding;
- Increasing public investment in research and innovation that can deliver global public goods, including the use of mission-oriented research and innovation policies;
- Developing robust internationally harmonized indicators for financing such initiatives;
- Stronger international collaboration on research infrastructures to better exploit the STI resources available in these infrastructures;
- More effective governance models that exploit flexibility and innovation, including addressing the complex relationships between partners in a multitude of bilateral and multilateral networks.

The InterAcademy Partnership – a global partnership of over 140 science, engineering and medical academies – have also in May 2019 published a report on [Improving the Scientific Input in Global Policymaking](#). The report called for an increase in evidence-informed policy-making and

mutual learning, and to use the global science community to help understand and account for interactions between the SDGs.

The UN's [Global Sustainable Development Report](#) for 2019 has been published in September 2019. The report – which is the only comprehensive global report on sustainable development – brings together a broad range of existing scientific assessments and reviews global progress and future sustainable development pathways in an integrated way. The report concludes that scientific rigor and active engagement with the 2030 Agenda are indispensable, complementary cornerstones of current science in the service of international development, and **by adopting different modes of research and interaction with explicit societal goals like the SDGs – such as taking them either as an endpoint, a starting point, or a means of designing research** – scientists can collaboratively address diverse development challenges and expand the scope for concrete policy action.

Additionally, UK Research and Innovation (UKRI) has commissioned seven UK leading universities, research centers and the United Nations Development Programme (UNDP) to work together to better understand the ways in which science, technology and innovation contribute to the SDGs. The [two-year initiative](#) was announced in July 2019, with a full report due to be published in 2021.

## **Case Studies: current mission-orientated approaches towards grand challenges**

A number of GRC participants are currently using mission-oriented research initiatives in relation to addressing global grand challenges. Some specific examples include:

### *United Kingdom: Global Challenge Research Fund Interdisciplinary Research Hub programme*

The Global Challenge Research Fund (GCRF) is a £1.5 billion fund to support cutting-edge research that addresses the challenges faced by developing countries. GCRF promotes challenge-led, disciplinary and interdisciplinary research initiatives, to address the problems faced by developing countries. The SDGs provide a broader framework from which the solution-based approaches of the GCRF's approach is defined by.

The **GCRF's Interdisciplinary Research Hub programme** supports transformative research and innovation at scale to address intractable development challenges. There are twelve Hubs which address the breadth of the UN Sustainable development goals and involve 550 researchers, 400 unique partner organisations in 85 countries.

One example is the 'GCRF Accelerating Achievement for Africa's Adolescents Hub' which seeks to address the cycle of poverty, violence, low education and poor health that affects many young people in Africa. This Hub will work with policy makers, NGOs and adolescents themselves to discover which combination of services can most efficiently and cost effectively help adolescents reach their potential. By testing different combinations such as malaria prevention, business skills and violence prevention, this Hub will identify 'accelerator' packages to boost nutrition, health, schooling, employment,

gender equality and safety for teenagers across Africa. This Hub involves 15 partner countries and 56 partner organizations, highlighting the value of multiple researchers in multiple countries linking projects to shared missions framed in the SDG's. The initiative will in turn contribute towards SDGs 1, 2, 3, 4, 5, 6, 8, 16 and 17.

## *South Africa: DST-NRF Centres of Excellence*

Established in 2008 and with a combined investment of USD 82 million thus far, the Department of Science and Technology (DST) - NRF Centres of Excellence (CoEs) are physical and virtual centres of research committed to developing novel ideas that focus on critical matters facing South Africa. The CoEs concentrate existing capacity and resources to enable researchers to collaborate on projects that are locally relevant and internationally competitive. There are fourteen CoEs, as well as the National Institute for Theoretical Physics and the Centre for Indigenous Knowledge Systems, both of which are implemented aligned to the CoE modalities.

The CoEs are specifically designed to accelerate delivery of appropriate human resources and knowledge capacity as well as raising international competitiveness, visibility and esteem of South African science. They are considered national assets for societal benefit, promoting collaborative inter- and transdisciplinary research, and the diffusion of knowledge to where it is needed. They fulfil three key aspects, also critical in the delivery of the SDGs: innovation, excellence and relevance. This strategic investment is contributing to South Africa's National Development Plan 2030 and the country's attainment of the SDGs. In their collective, the CoEs contribute to SDG 1, 2, 4 and 5.

The CoE in Strong Materials has developed a diamond sensor for radiography measurements for mammography, thereby increasing the efficiency and effectiveness of such testing for women. The CoE in Biomedical Tuberculosis Research has developed a TB Screening Kit. The CoE in HIV Prevention developed an antibody (CAP256-VR26.25.LS) which neutralizes HIV-1. Finally, the CoE in Tree Health Biotechnology contributed to a saving of R1.2billion in forestry biocontrol of pathogens in the period 2008-2014.

The CoEs, long-term strategic research and human capital development platforms, offer evidence based outputs and outcomes and are aligned to the objectives of mission-driven research in the South African science landscape.

## *Chile: Astronomical Observatories*

The geographical conditions in the north of Chile make the skies in these latitudes exceptional for **astronomical observations**. Therefore, it is no coincidence that for half a century now, the largest and most modern observatories in the world have settled in Chile. This comparative advantage over other countries provides an opportunity to focus on

astronomy as mission-oriented research that develops not only science, but also technology, education and innovation in the industry.

In order to achieve all this, it is necessary to generate a long-term strategy that involves different levels of public-private interaction. Funds for research, telescope time reserved for the local scientific community, a regulation that protects the darkness of the skies, a state office that coordinates synergies with the different stakeholders and the administration of lands reserved for the installation of astronomical projects, are some of the initiatives implemented that point to gain benefits from this natural laboratory.

### *European Commission: Horizon 2020 Societal Challenges*

Under Horizon 2020, the European Commission introduced the concept of **Societal Challenges** where they defined cross-cutting areas of activity for research. The initiative saw seven Societal Challenges included within the Horizon 2020 Framework Programme, which brought together resources and knowledge across different fields, technologies and disciplines, as well as covered activities from basic research to market-oriented activities.

This approach increased coherence and coordination and led to a move away from traditional sectoral research programming. However, impact was still assessed at the level of individual projects whilst the broader impact on society was not assessed.

The interim evaluation of Horizon 2020 and the high-level group chaired by Pascal Lamy found that the next framework for research and innovation would need to: make it easier for citizens to understand the value of investments in research and innovation; and maximise the impact of investments by setting clearer targets and expect impact when addressing global challenges. Taking a mission-orientate approach was therefore seen as one way this could be done.

### *United States of America: 10 Big Ideas*

Since 2017, the U.S. National Science Foundation (NSF) has been building a foundation to spur bold, interdisciplinary questions that will frame the NSF's long-term research priorities. These 10 Big Ideas include navigating and mapping the rapid changes of the Arctic; understanding the genetic code and rules that predict an organism's observable characteristics and interactions with its environment; using powerful new syntheses of observational approaches to provide insights into the nature and behaviour of matter and energy, and similar other grand scientific challenges.

Funding these interdisciplinary ideas will push forwards the frontiers of U.S. research, lead to discoveries as yet unpredictable, and provide innovative approaches to solving some of the most pressing problems the world faces. They will also require collaborations among academia, industry, private foundations, other agencies, science academies, and society.

## **The role of the Global Research Council**

The GRC is ideally placed to help foster a common understanding and approach towards mission-oriented research to support the delivery of the SDGs. As a virtual organisation, the GRC brings together research funding agencies from across the world together, with a view to fostering cooperation and collaboration between its participants. This unified approach is needed to effectively address the challenges associated with establishing a concerted approach towards mission-oriented research.

The GRC aims to not only improve communication and cooperation among global research funding agencies, but also to promote the sharing of best practice and data to support high-quality collaboration among funding agencies worldwide. Ensuring that funding agencies and wider stakeholders within the research and policy landscapes have access to this best practice, and the data that underpins them, is crucial in shaping how best to proceed as a collective. The forums that the GRC facilitates – notably through its Annual and Regional Meetings – offer the ideal space for this sharing of knowledge and ideas to take place.

A collective voice and approach towards mission-oriented research will not only ensure that funding agencies are aligned strategically, but also help leverage and influence policymakers and decision makers who ultimately shape our wider national and supranational approaches towards these challenges. Speaking with one unified voice to these decision-makers will therefore provide added weight to the messages we as funding agencies share with our decision makers through the GRC.

Finally, the GRC seeks to respond to opportunities and to address issues of common concern in research and education and explore mechanisms that support the global science enterprise and broader global scientific community. Mission-oriented research as a means of addressing the grand challenges of today are therefore in line with this vision for the GRC and can provide a framework and overarching aim for continuing cooperation and dialogue between its participants.

## **Relevance to the Public Engagement theme**

Mission-oriented research is one of two themes for the GRC's 2020 Annual Meeting. The other theme for the Meeting – public engagement – carries a natural symbiosis to considerations around mission-oriented research.

Missions of great scientific endeavor have often captured the imagination and engagement of the wider public, from millions of citizens watching the first humans land on the moon, to active participation in national and international biomass surveys. Ensuring public involvement in the identification and participation of, as well as ultimate benefit from such missions, is essential to their overall success. Missions must therefore be framed within challenges that are broadly agreed to be of high social importance and provide for a range of opportunities for engagement by wider society (Mazzucato, 2018).

## Questions for discussion

1. How do GRC participants understand the definition of mission-oriented research, in the context of their national research funding environments?
2. What experience do GRC participants have with mission-oriented research activities and initiatives (specifically related to the SDGs)?
3. Is there interest for multilateral collaboration between GRC participants?
4. Would joint mission-oriented research activities around the SDGs been an appropriate area to start such collaboration?
5. Are there other grand challenges – beyond those within the SDG framework – that GRC participants would be interested in discussing potential multilateral collaboration around?
6. How would appropriate missions be identified by agencies participating in such a collaboration?
7. What would such a collaborative approach towards SDG -driven mission-oriented research look like? And how would it work in practice?

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