

Charter for the Earth-Humanity Coalition

Sciences for Equitable Wellbeing on a Healthy Planet

Enabling the International Decade of Sciences for Sustainable Development 2024-2033 (IDSSD)

A proposal by the Steering and International Advisory Committees of the International Year of Basic Sciences for Sustainable Development (IYBSSD)

09 April 2024, v3.1

(difference with v3.0: addition of the Preamble)

PREAMBLE. The International Decade of Sciences for Sustainable Development (IDSSD, 2024-2033) was proclaimed by the United Nations General Assembly (UNGA) in the Resolution 77/326 on 25th August 2023. This was the outcome of a process initiated in the context of the successful International Year of Basic Sciences for Sustainable Development (IYBSSD, 2022-2023) and in particular as a consequence of conversations happening on occasion of the World Conference on Basic Sciences and Sustainable Development, celebrated on 19-22 September 2022 in Belgrade, Serbia.

Building on the achievements and the learnings of IYBSSD, a small group of its partners, and most notably representatives from the International Union of Pure and Applied Physics (IUPAP), the European Organization for Nuclear Research (CERN), the World Academy of Art and Science (WAAS), and The Club of Rome (CoR), decided to promote an international decade with a wider scope, higher ambitions, and the transdisciplinary involvement of all sciences and domains of knowledge towards sustainable development. With the decisive support of the Republic of Serbia and other UN Member States, this ultimately led to the proclamation of IDSSD.

Both IYBSSD and IDSSD are under the auspices of UNESCO, who is explicitly invited in the IDSSD Resolution to lead the implementation of the Decade, in collaboration with other stakeholders, including those involved in IYBSSD. In order to support the implementation of IDSSD in the most effective way, the group of partners mentioned above decided to promote the creation of the Earth-Humanity Coalition (EHC) as a large network of organizations committed to a transformative role of IDSSD. The aim is to mobilize a wide array of capacities all around the world with the same kind of dynamism, agility and effectiveness shown in IYBSSD but at a higher level of scope, ambition and commitment over time.

With this background, EHC will be a relevant partner in the implementation of IDSSD, in continuous coordination and synergy with UNESCO and a constellation of other partners. While in the conceptualization by UNESCO IDSSD addresses a wide variety of challenges in the science-society nexus, EHC concentrates on the specific goals described in this Charter, and particularly on mobilizing in a bottom-up approach a vast array of initiatives already engaged with transdisciplinary sciences at the service of regeneration and sustainability.

Therefore, EHC and its Charter have to be understood in the wider context of IDSSD, as curated by UNESCO. The goals described in the Charter are those of EHC, which fit well with some the challenges addressed in the wider IDSSD programme. Also, EHC commits itself to contribute to the regular reporting of IDSSD to UNGA, that will be prepared by UNESCO.

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AMBITION. The Resolution proclaiming IDSSD (UNGA Resolution 77/326, 25th August 2023 verbatim):

- *Acknowledges* that humanity is exposed to complex challenges, and that the full implementation of the 2030 Agenda for Sustainable Development in all its dimensions requires **a more effective and inclusive approach based on synergistic cooperation of all sciences** – basic and applied sciences as well as social and human sciences, including traditional knowledge – enabling the development of technology, innovation, and education,
- *Emphasizes* that the evidence-based methodologies and the models of operation and collaboration used in research can **support policymakers in finding adequate responses to the present and future complex challenges**, and that open science can **help in promoting and strengthening international cooperation**, and
- *Recognizes* that developing countries face specific challenges in accessing new sciences and technologies, stressing **the need to bridge the divides within and between countries**, and highlighting the importance of financing and capacity building.

The organizations and individuals engaged in the Steering and International Advisory Committees of IYBSSD consider that these determinations in the IDSSD Resolution call for an ambitious approach in the implementation of the Decade, by highlighting what is still missing in the contribution of sciences to the successful realization of the UN Agenda 2030, namely:

- the joint mobilization and collaboration of all domains of knowledge, beyond the traditional framing and fragmentation into separated disciplines, including indigenous and local knowledge, as guided by principles of equity and justice that acknowledge the disenfranchising legacies on people of the Global Majority and indigenous communities throughout the world of the historical imperialism and settler colonialism.
- a new role for sciences to work together for humanity, in response to its needs in challenging times and in anticipation of the needs of future generations," but also in better articulation with governance, policymaking, and both societal and Earth processes;
- a decisive contribution of sciences and humanities to address the gaps and divides within and between worldviews, cultures, communities, values and nations, in order to promote equitable wellbeing for all on a diverse, balanced and healthy planet.
- the determination to address barriers to equity within knowledge creation itself, in line with the overall aspiration of the IDSSD.

In our view, an ambitious implementation of the Decade, over and beyond its timespan, will be predicated upon **significant and concrete changes in how sciences and humanities operate, how they articulate with and for society, and how they contribute to address the challenges of our age** in closer collaboration with all other political, economic, and social actors. By 2033, sciences and society at large must become better able to address the multiple emergencies that humanity faces today, to facilitate the elaboration and implementation of positive and peaceful responses, and to navigate the corresponding processes of societal transformation.

The Decade is called to have a transformative impact on the designs of research, innovation, and development. The aim is to frame substantially their processes and their role in society and their interactions with policymaking and society at large, across a diversity of conceptual borders. These ambitions are the groundwork for the present initiative and for the goals described below.

In order to create an effective framework and enable an ambitious implementation of the Decade,

the Steering and International Advisory Committees of IYBSSD propose the creation of **The Earth-Humanity Coalition** to promote the role of **Sciences for Equitable Wellbeing on a Healthy Planet**. This document describes briefly its ambition, goals, and strategic guidelines for the whole Decade as well as its organizational roadmap for 2024.

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GOALS. The role of the Decade itself is to create the conditions required for the mentioned transformative change of research, innovation, and development to happen. We identify the following goals for the Decade to be able to fulfil this role:

1. **CO-CREATE the Web of Earth-Humanity Sciences**, a worldwide network of thousands of transdisciplinary hubs active at the local, national, and global levels to address the existential challenges facing humanity in the 21st century. The web will build on and extend from existing initiatives to promote context-grounded spaces for transformative exchange, integration, resonance, and fruitful collaboration across geographies, cultures, and disciplines, among scientists, and together with all other societal actors. We aspire to recreate, expand, and multiply the spirit of collaboration inherent in Big Science, which has shown its capacity to build very much needed intercultural bridges and scientific infrastructures and thus contribute to mutual understanding and peace in numerous conflicts and challenges worldwide.
2. **SUPPORT** the emergence of **a new culture of wellbeing**, grounded on leading edge science and traditional and local wisdom in which relationships, collective responsibility, equity and creativity are central to a healthy humanity and hospitable biosphere. The fundamental unity and interdependence of humanity and life at large imply an emerging redefinition of what human development means. This in turn is made possible by showing that all sciences and arts, as twin expressions of human creativity, show the path to enjoyable lives for all within the boundaries of the planet. This definition is consistent with the vision of the Earth as a living whole that is always emerging out of the manifold of biophysical, human and multispecies relations that make it up.
3. **FORMULATE** in novel ways the questions critical for the overall goal of equitable wellbeing and habitability on a healthy planet. The originality in the formulation will come from the use of a multiplicity of lenses across all sources of knowledge as well as by prioritizing challenges that massively affect habitability. Three good examples of such questions are “water as a critical common good”, “the design of the spaces we inhabit to make them better attuned to their natural contexts” and “designing societal governance to be just and as a partnership with Earthly processes”.
4. **PROMOTE** the reframing of the agendas and funding instruments used by public and private actors in the domain of research, innovation, human development and peace, in order for them to reflect and facilitate the novel and integrative role of sciences called by the Decade.
5. **CONCEIVE AND PRODUCE** a set of credible and practical instruments of orientation to navigate the processes of transformation to sustainable development. This should be done in active collaboration with policymakers, and public and private actors as well as with citizens at large, in order to enable the new role of sciences in and for society.
6. **CO-DESIGN AND CO-CONSTRUCT** the processes and organizational structures required not only to execute successfully the Decade itself but also to serve as the platform for the fulfilment of the ambition described above. Ultimately, this would create the **Web of Earth-Humanity Sciences to attune and care for the Web of Life**.

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PHASES OF THE DECADE. A key step in the implementation of the Decade is to understand what processes and timelines will be appropriate to achieve the goals mentioned above, which are of a different nature and cannot happen all at the same time. Significant funding will obviously be

required, especially when the momentum of the Decade creates the opportunity for deeper and larger transformations to happen. It seems reasonable to imagine at least three phases in the implementation of the work of **the Earth-Humanity Coalition in support of the Decade**, namely:

1. **ACTIVATION**, to create the conditions of engagement of wide circles of actors, launch the processes, and complete an initial program of activities.
2. **MOBILIZATION**, during which the Coalition develops in scope and capacity to its optimal size for initial implementation and creates the outreach and spaces appropriate to involve large communities of scientists and other actors all around the world.
3. **EXPANSION AND CONSOLIDATION**, during which the concept of a new role of more fully integrated sciences across all knowledge domains, as pilot-implemented in phase 2, can be tested, evaluated and catalysed to grow for global impact in addressing the critical challenges now facing the Earth and human societies around the planet. Consequently, significant resources are to be mobilized in order to increase the accessibility and scope of the model to produce significant changes at the global level.

The Activation phase should not last more than 2 years and could be driven by a small and effective team, supported by funding in the range of a million Euros per year. The Mobilization phase will require a personnel structure of a few dozen full-time equivalent staff at all organizations levels and resources in the range of 5 to 10 million Euros per year, during 3 years. The last 5 years of the Decade would be used for the Expansion and Consolidation phase, multiplying by 10 the budget of the Coalition, with an ambition to influence and inform overall research, innovation and technology funding in a range of billions of Euros.

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STRATEGIC GUIDELINES. We outline here some principles to guide the design and implementation of the activities of the Coalition:

- **TRANSFORMATIVE MOMENTUM:** We look deliberately beyond the mere continuation of the existing processes of research, innovation, and technology, which are characterized by a high and growing fragmentation, a lack of alignment with societal challenges, and an ineffective interaction between sciences, policy-making, and society at large. In order to move from the status quo, we need to build upon the momentum created by the challenges themselves (i.e., climate change, social fractures, destruction of ecosystems and species, pollution of land and water systems as well as the atmosphere, disempowerment and dispossession, violent confrontations, etc.) and by the aspirations of large parts of humanity to live in a better world in peace among humans and with the Earth. This implies creating the conditions for generally unheard and unseen actors (countries from most of the world, ordinary cultures, rural and peri-urban actors, younger generations, and women and all marginalised groups) to have a strong role in the unfolding of the Decade.

- **SEEDS OF THE NEW:** There are already many good but mostly unpublicised examples where multiple domains of human knowledge are mobilized together to address relevant challenges, generally at local or regional levels, in equitable interactions with all sectors of society. The first aim of the Web of Earth-Humanity Sciences is to acknowledge these convergences as resources and showcase those successful examples of sector-crossing/transdisciplinary production of knowledge and action for the common good of communities and environments. It should also be a priority to promote the creation of conditions that give these and similar exemplary initiatives of convergent knowledge production and societal uptake better opportunities to inspire, take root and flourish in ways that are respectful of and appropriate to a wide range of local, social, cultural and environmental contexts.

- **MUTUAL LEARNING:** As a basic assumption, we understand that learning does not happen in isolation; it is always mutual. In its strongest sense, “learning” occurs when knowledge is arrived

at, tested and used. Following this logic, we cannot say we have learned until we have changed our patterns of behaviour. In that sense, we aim to establish processes of learning across the many chasms of fragmentation characterizing the current state of the world including within knowledge creation, i.e., across the chasms of social and economic status, cultures, worldviews, disciplines, geographies, gender, and age.

- **THEMATIC THREADS:** In order for the Decade to produce actionable knowledge and to promote the co-construction of responses to societal challenges, we will develop specific vectors of knowledge and action, to be identified and co-designed in the early stages of work within the Coalition. Again, in building on existing activities, three relevant dimensions include the following:

- Science Diplomacy, enhancing the role and the spirit of integrative and transdisciplinary sciences to overcome fractures created by geopolitical clashes and all kinds of violent conflicts (generally also related to sustainability issues such as the availability of resources);
- Science-Policy Interfaces (SPIs), as a specific activity aimed at transforming the relationships between sciences and policy-making processes at multiple levels, as, e.g., already initiated by the Montpellier Process;
- Science-Society Interactions, evolving from one-sided science communication into processes of participation and co-creation of scientific agendas and approaches to challenges of societal relevance.

The activities promoted by the Coalition will also give room for specific programming led by some of its members, in a flexible manner while at the same time paying attention to these Strategic Guidelines.

- **LEVERAGING ON DIGITAL COLLABORATION:** The best use of digital infrastructures will be made to facilitate the unfolding of strategic vectors, enabling the implementation of activities and goals. A platform will be developed to serve as a central nexus for research hubs to cohere and communicate effectively, integrating with the organizational structures for sharing knowledge and approaches. The infrastructure aims to support internal collaboration within the framework and foster external engagement with relevant bodies and stakeholders, enhancing the project's collective intelligence and outreach.

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ORGANIZATION. The joint action of a large group of scientific academies, associations, and unions coordinated by the International Union of Pure and Applied Physics (IUPAP) ensured an effective and successful execution of IYBSSD. This is the starting point for the Coalition. At the same time, the Decade calls for a wider mobilization of organizations and individuals, with a substantial effort of coordination of all contributions and requires an efficient management of all the activities aiming at the realization of the goals described above.

We propose here a preliminary definition of a structure of governance and execution of the program of activities of **The Earth-Humanity Coalition in support of the Decade**, designed to maximize the chances for an effective and successful implementation of the goals of the Decade as described above. We present here five functional bodies considered as necessary:

- **The General Assembly** will include the representatives of the organizations having participated in IYBSSD as well as of other scientific organizations, particularly from social and humanistic disciplines, and other stakeholders involved in knowledge co-production in the sustainability domain, to be identified among the relevant contributors to IDSSD. This will be the largest body of the Coalition, ensuring a wide representation of scientific communities and civil societies from the entire world.
- **The Governing Board** will act as the governing body of the Coalition, and will include a

representative of the United Nations Educational, Scientific and Cultural Organization (UNESCO). It will be a small group of committed personalities (up to 12 persons) in charge of the definition of the guidelines for the activities of the Coalition and of a regular monitoring and feedback structures on its program of activities. The Board will report regularly to the General Assembly.

- **The Programming Board** will be formed by representatives of the organizations of any kind participating in the Web of Earth-Humanity Sciences. They will embody the spirit of transdisciplinary hubs working at all levels to address societal challenges and will play the key role in defining the program of activities of the Coalition, by prioritizing those serving the purpose of the Web.
- **The High-Level Support Committee** will include eminent scientists and high-level representatives of UNESCO and other multilateral organizations as well as decision - makers from public institutions and the philanthropic and business sectors. This will include representatives of the UN Member States particularly committed to this ambitious vision for the Decade. This Committee will provide strategic oversight and guidance in order to ensure that the IDSSD program remains up to date and collaborative at all levels. The Committee will also aim at leveraging assets and networks to enable an effective implementation and dissemination of the program of activities of the Coalition, especially through the mobilization of appropriate sources of funding.
- **The Secretariat**, a permanent structure under the authority of the Governing Board, will have the operational capacities to implement and coordinate the activities of the Coalition and will work in close collaboration with UNESCO and other relevant actors.

We propose that the General Assembly and Governing Board start operating in the shortest time frame (see below), together with the core of the Secretariat, while the Programming Board and High-Level Support Committee and the full-fledged Secretariat will be properly set up when a certain degree of maturity is reached in the definition of activities and the mobilization of contributors. In the mid-term, this will entail the creation of appropriate legal structures, yet to be defined, to ensure proper representation and operational effectiveness in the management of the Coalition, and to host the bodies described above in a way ensuring good governance and accountability, all in close collaboration with UNESCO. Furthermore, in the constitution of the above, the principles of inclusion and diversity will be held paramount across geography, social status, ethnicity, gender, and other equity dimensions.

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IMMEDIATE NEXT STEPS AND PLAN FOR 2024. The call for action is as follows:

- Create a Working Group to finalize the elaboration of this document as well as a draft of the Memorandum of Understanding for the constitution of the Coalition, and further support in the initial stages of the Coalition.
- Initiate the identification of other organizations and individuals to be invited to join the process of constituting the Coalition, in order to expand its scope to all sciences and areas of knowledge, with a particular emphasis on the representation of actors from most of the world and/or already engaged in a transformative role of sciences in society.
- Convene as soon as possible the General Assembly for the constitution of the Coalition and its Governing Board. The General Assembly will be formed by the organizations represented in the Steering and International Advisory Committees of IYBSSD and the other organizations and individuals invited to be part of the process.
- Invite the International Union of Pure and Applied Physics (IUPAP) to be the operational host of the Coalition during 2024, in the same manner as it operated IYBSSD, and to organize the core of

the Secretariat.

- Mobilize financial contributions from the members of the Coalition as well as from some UN Member States and other close partners to cover a budget for 2024 of around 1 million Euros.
- Initiate the communication activities of the Coalition with the creation of its public image (the logo and website) and of initial contents (including a press release).
- Initiate the process of developing a detailed plan of activities for 2024-2025. This will include the **World Conference on Science and Art for Sustainability**, to take place in Belgrade (Serbia) in September 2025.
- Initiate the establishment of partnerships with other actors with the capacity to mobilize resources for the fulfilment of the Coalition's goals and plan of activities.

In the Coalition's first phase of operations (the Activation Phase, see above), the necessary financial resources would be mobilized from its members, some governments, and philanthropic organizations, to be used primarily in the structuring and implementation of activities aimed at mobilizing a wide circle of actors, in accordance with the vision of the Web of Earth-Humanity Sciences described in Goal #1 (see above). In the later phases of the Decade, funding would be provided from the same organizations as well as from a variety of other potential sources, public and private, all to be agreed upon.

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