

Feasibility Study

UNESCO Category 2 Centre

**International Research Centre on Artificial Intelligence at Jožef Stefan Institute, Ljubljana,
Slovenia**

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BACKGROUND

1. On 29 May 2018, the Government of Slovenia proposed to the Director-General the establishment of a Category 2 Centre on Artificial Intelligence under the auspices of UNESCO at the Jožef Stefan Institute in Ljubljana. The Centre once established will support UN Sustainable Development Goals (more specifically SDG 4, 5, 8, 9, 10, 13, 16 and 17 that are part of CI Sector's mandate).

2. As authorized by the Director General of UNESCO and as per the provisions of UNESCO's Integrated Comprehensive Strategy for Category 2 Institutes and Centres (37 C/18 Part I), the purpose of the feasibility study is to evaluate the technical, administrative and financial feasibility of establishing an International Research Centre on Artificial Intelligence (IRCAI) at the Jožef Stefan Institute in Ljubljana, Slovenia as a Category 2 Centre under the auspices of UNESCO. The feasibility presents:

- Clear programmatic linkages between the activities of the proposed Centre and UNESCO's strategic programme objectives and priorities, including UNESCO's two global priorities of gender and Africa, as well as CI sector's programme priorities;
- The scope of the activities of the proposed centre and the ability and capacity of the centre to meet its objectives;
- The type and nature of cooperation that the Centre proposes at a global, regional, sub regional or interregional level with UNESCO entities, including field and regional offices and UNESCO national commissions in terms of strengthening the provision of policy advice, capacity-building in Member States and the promotion of North-South and South-South cooperation;
- The complementarity and redundancy of the proposed centre with other category 2 entities or with other UNESCO networks and partnerships;
- The likely impact of the engagement with the proposed centre on the capacity of the Secretariat to undertake effective coordination of this centre and its impact on helping the sector achieve its strategic goals;
- The governance and financial sustainability of the centre and their alignment with the provisions set out in UNESCO's Integrated Comprehensive Strategy for Category 2 Institutes and Centres (37 C/18 Part I);

3. IRCAI will be established at the existing Jožef Stefan Institute. Jožef Stefan Institute (JSI) is the leading research institution in Slovenia having over 900 researchers within 27 research departments and 10 centres working in the areas of computer science, physics, and chemistry and life sciences. The International Research Centre on Artificial Intelligence (IRCAI) will be created by transferring the Centre for Knowledge Transfer in Information Technologies (CT3) to the IRCAI. The Centre currently has more than 180 researchers and cover areas within Artificial Intelligence, such as Machine Learning, Data-Mining, Text-Mining, Web-Mining, Multimedia Mining, Semantic Technologies, Social Network Analysis, Language Technologies, Natural Language Processing, Cross-lingual Technologies, Real-time Data Analysis, Data Visualization, Knowledge Management, Knowledge Reasoning, Inductive logic programming, Evolutionary computation, Multistrategy learning and principles of multiple knowledge, among others.

Methodology adopted for the feasibility study

4. The method adopted to collect information with reference to the purpose of the feasibility study mentioned above included, review of documents pertaining to the Centre's activities, research, staff, finances and plans for the future. Further, the programme specialist visited the Centre in Slovenia

for detailed discussions with the management staff and researchers at Jožef Stefan Institute, the Slovenian National Commission for UNESCO, concerned Minister in the government of Slovenia and other relevant stakeholders including Centre's partners. The centre's research labs, facilities were visited, and the products and services that it has developed using AI to support SDGs were examined.

Context of Artificial Intelligence

5. Artificial Intelligence (AI) describes a set of advanced general-purpose digital technologies that enable machines to do highly complex tasks effectively. AI is not a single technology – it is a set of rich sub-disciplines and methods, vision, perception, speech and dialogue, decisions and planning, robotics and so on. There is a need to consider all these different disciplines for finding real solutions to deliver value to humanity. Recently, AI technologies have started getting more attention due to a series of successful applications ranging from intelligent environments, intelligent networks, smart cities, autonomous systems to humanoid robotics and cognitive systems. Although AI is set of algorithms, its impact and potential consequences globally are seen to be crucial for humanity. The rapid technology development and aggressive deployment of AI into various segments of daily life including cyber and regular warfare are raising concerns across the globe. Current societal mechanisms including moral and legal frameworks are not equipped to effectively respond to such rapid developments.

6. Key factors have combined to increase the importance of the AI in recent years:

- New and larger volumes of data;
- Supply of experts with the specific high-level skills;
- Availability of increasingly powerful computing capacity.

7. Humanity today stands at stage where future productivity improvements and hence will be derived from cognitive machines. Humanity is accustomed to technology driven change and development, but the pace of current change driven by AI is unprecedented. The impacts on society and the economy will be profound, although the exact nature of those impacts is still uncertain.

8. This is why a comprehensive approach to research and study AI technologies, their applications, legal frameworks and social implications is required. The aim of the Category 2 Centre on Artificial Intelligence under the auspices of UNESCO therefore will be to provide open and transparent environment to not only research and discuss AI but also provide guidelines and action plans to deal with AI related issues to all stakeholders across the globe.

9. Given the current leadership of Slovenia on AI, establishing a Category 2 Centre under the auspices of UNESCO would greatly bolster development of the AI technology and its deployment in all sectors of industry, education and government.

Introduction to the proposed Centre

10. The Centre will be created by transferring the Centre for Knowledge Transfer in Information Technologies (CT3) to the International Research Centre on Artificial Intelligence (IRCAI) as a Category 2 Centre under the auspices of UNESCO at the Jožef Stefan Institute. The Centre will retain its current research strength of more than 180 researchers, who cover areas within Artificial Intelligence such as Machine Learning, Data-Mining, Text-Mining, Web-Mining, Multimedia Mining, Semantic Technologies, Social Network Analysis, Language Technologies, Natural Language Processing, Cross-lingual Technologies, Real-time Data Analysis, Data Visualization, Knowledge Management, Knowledge Reasoning, Inductive Logic Programming, Evolutionary Computation, Multi-strategy learning and principles of multiple knowledge, among others.

11. Jožef Stefan Institute was founded in 1949 initially as an institute for physics within the Slovenian Academy of Sciences and Arts. Since then it has evolved into a multidisciplinary national institute conducting basic and applied research in the fields of natural sciences and technology. 27 research departments and 10 supporting centres with more than 950 employees specialize in research in physics, chemistry and biochemistry, electronics and information science, nuclear technology, energy utilization and environmental science. The institute today co-operates with many leading scientific research institutions worldwide and is globally recognized for its excellence.

12. The institute started to work on Artificial Intelligence in the 1980's and has a long and successful history in the field. It currently hosts several research centres on AI, including Artificial Intelligence Laboratory, Department of Intelligent Systems, Department of Knowledge Technologies, Department for Automation, Biocybernetics and Robotics, SensorLab and Centre for Knowledge Transfer in Information Technologies comprising altogether 180 researchers.

13. **Centre for Knowledge Transfer in Information Technologies**, which is proposed to be transferred as the International Research Centre on Artificial Intelligence (IRCAI), was setup by three IT departments in 1995 as a horizontal centre to transfer knowledge and research results to industries and the general public. Since then the Centre has taken part in more than 70 research projects mainly in the areas of implementing AI to various domains and developing world class online education programme through Video Lectures (<http://videlectures.net>) and UNESCO Chair on Open Technologies for Open Educational Resources and Open Learning.

14. The Centre also draws its strength from the Artificial Intelligence Laboratory of JSI, which with 40 dedicated researchers, is one of the largest European research groups working in the areas of machine learning, data mining, language technologies, semantic technologies and sensor networks. The key research involves combining modern statistical data analytic techniques with more semantic/logic based knowledge representations and reasoning techniques with the goal of solving complex problems such as text understanding, large scale probabilistic reasoning, building broad coverage knowledge bases, and dealing with scale.

15. The researchers of the Centre have developed several software tools for multimodal data analysis, among others: the Text-Garden suite of text mining tools, the OntoGen system for ontology learning, the Document-Atlas for complex visualization, the AnswerArt system for semantic search over large textual databases, the Enrycher system for semantic enrichment of textual data, SearchPoint system for visual and contextualized Web browsing, XLing for cross-lingual matching and categorization across 100 languages, and Event Registry for global real-time media observatory.

16. Centre for Knowledge Transfer in Information Technologies has ten researchers and technical staff working in the areas of research results dissemination and eLearning. In particular, the Centre is well known by its portals: VideoLectures.Net with multimedia materials of numerous scientific events, on-line training materials, and collection of tutorials on different scientific fields; ScienceAtlas.ijs.si and IST-World.Org for analysis and visualization of large bibliographic and project databases. Currently, the Centre is responsible for management, training and dissemination activities of several EU projects.

17. In terms of talent and human resources, there are more than 180 researchers in AI across several departments at JSI making the Centre, a proven leader of AI research capacity per capita. Stakeholders in AI across various industries, and in particular the national research institute "Jožef Stefan Institute" are well connected to all main AI research centres across the world and actively involved in several international AI communities.

Objectives, purpose and scope of IRCAI

18. IRCAI's overall objective revolves around Research, Advocacy, Capacity Building and Dissemination of information about artificial intelligence and other advanced ICTs.

Objective 1: Research

19. The goal of the Centre will be to develop artificial intelligence based tools, products and services to help UNESCO Member States accelerate their efforts to meet the Sustainable Development Goals. The Centre's existing research program will be expanded to focus on achieving SDGs 4, 5, 8, 9, 10, 13, 16 and 17 with the use of AI. This will be done through research on theoretical problems, and by applying cutting-edge science to solve real-world problems. The research will be undertaken with recognition of the legal, ethical, economic and societal implications of these technologies to make AI fair, transparent, and ethical. In order to support research addressing these challenges, an open online monitoring and analytics environment will be created to provide researchers access to data, tools, services, platforms and indicators relevant to AI.

20. This objective will be achieved through five sets of activities:

- i. **Open AI solutions** will include the use of AI to address challenges of sustainable development through research and by engaging in technology transfer to effect rapid deployment of the technologies in a variety of applications in real-life settings, thereby helping bridge the global digital divide.
- ii. **Facilitate AI adoption** by simulating AI take-up scenarios investigating strategies that stakeholders should pay attention to while introducing AI into their environments. This relies on the learn-measure-build methodology.
- iii. **AI scenario planning** will examine what the Future AI would look like, what could be its implications. This will investigate and experiment with future visions of emerging technologies. Thereby, providing Member States with critical reflections at the intersection of technology and policy.
- iv. **Cross-disciplinary reflection on AI** will address AI related aspects through social science research on topics including ethics and accountability, public policies, legal frameworks, governance, social aspects, and environment in the conversation on AI. UNESCO's R.O.A.M principles will guide this objective.
- v. **AI Observatory** will gather available data on SDGs into a global AI resources platform and provide smart analytics and indicators. Attached open services will provide real time information available to researchers.

Objective 2: Policy innovation

21. The Centre will provide expert technical and non-technical advice to policy and decision makers on how best to apply AI for SDGs. This will be done by exploring wider implications of AI on society. The Centre will give demand-responsive advice and ensure that Member States benefit from cutting edge AI and data-driven technologies. In particular, the Centre will assist in building effective policy decisions and operational frameworks related to AI for public service delivery, greater transparency and accountability. For this, the Centre will prepare a set of guidelines, information collection protocols, AI tool kits, policy briefs and regional analysis of AI ecosystem.

22. This objective will be achieved through four sets of activities:

- i. **Development of indicators** for understanding artificial intelligence ecosystem centered on 3 Cs of Commitment, Capacity and Creation by leveraging advanced ICTs for SDGs.
- ii. **Policy support** will be carried out by initiating multi stakeholder consultations that will culminate in development of guidelines, standards and toolkits to address policy challenges related to artificial intelligence.
- iii. **Multi stakeholder engagement** will aim to bring stakeholders in academia, government, civil society and the private sector for knowledge exchange
- iv. **Civic society outreach** will focus on assisting IGOs, NGOs, think tanks and other stakeholders affected by AI and enhance cross disciplinary conversations on how AI

could benefit individuals and societies. Information and literacy about Artificial Intelligence will help create a common language in the public sphere through which people understand the challenges and opportunities of AI.

Objective 3: AI Talent Development

23. AI capacity at the global, regional and national level depends on the local talent pool, talent flows and available training opportunities. Education systems need to anticipate changes in the skills required in a world where interactions with people and environment are increasingly mediated by technology. The Centre will collaborate and partner with other institutions to address challenges to education in the digital age and develop tools, guidelines and content to address the changing education needs of the world. UNESCO's expertise in the field of education will engender significant collaboration around this theme.

24. In the long-term a connected network of centers that will bring together academic expertise from world-class universities, industries, governments, and other stakeholders will provide insights for updating education systems.

25. This objective will be covered through two sets of activities:

- i. **Training** will include designing targeted programmes using duly carried out training need assessments to determine specific technical skills and competencies to leverage the power of AI. This will include doctoral training, in-university and in-service career research, executive education and curriculum development in AI. Training programmes will have a direct link with UNESCO's efforts to teach coding to young people.
- ii. **Networks** will be established across the Global South and North by continuing the Centre's work on mapping AI hotspots, cutting across all regions, to address and contribute to sustainable development through inclusive design and deployment of AI for SDGs. A specific stream will be "AI for Social Good" to foster community activities to maximize the benefit of AI for social good.

Objective 4: Impact and Outreach

26. This objective will ensure dissemination of AI knowledge to stakeholders and beneficiaries. The Centre understands the need to communicate scientific research and to engage with the wider public in the spirit of Citizen Science. This will be achieved through public engagement and events. The Centre will explain AI to the people using case studies; showcase good and bad practices; underline contextual dependencies; and reach out to other AI initiatives. IRCAI will achieve this objective by boosting technology transfer, research results and policy support in three clusters (i) Private sector with SMEs, start-ups and accelerators, (ii) University labs and public sector, and (iii) NGOs, CSOs and think tanks.

27. This objective will be covered through two activities within the **Outreach Programme**:

- i. **Advocacy** will focus on dissemination and setup a service for information and debate through traditional and online media channels. It will focus on objective reporting in addition to globally communicating the Centre's valuable achievements in relation to SDGs and best practice.
- ii. **Engagement** will create and popularize a portfolio of public events, workshops and conferences across all stakeholders' groups in the spirit of Citizen Science, specifically tailored to address AI research in developmental topics and specific SDGs. IRCAI will

provide a forum for the presentation and discussion with emphasis on showcasing results around SDGs.

Strategic alliances and networking with other institutions

28. Successful work of IRCAI will require wide scale collaborations and synergies. Therefore, the Centre will adopt a proactive outreach strategy to work with UNESCO centres, institutes and chairs; research labs; educational institutions; private sector; and grassroots organizations. Some of the networks that the Centre will continue to work with are presented in Table 1-3.

S. No.	Partners – Developed Countries
1	INRIA Lille – Nord Europe, France
2	Fraunhofer-Institut – Intelligent Analysis and Information Systems, Germany DFKI
3	Deutsches Forschungszentrum Fur Kunstliche Intelligenz Gmbh, Germany
4	University College London, United Kingdom
5	Stanford University, United States
6	Carnegie Mellon University, United States
7	Knowledge 4 All foundation, UK
8	AI4Good foundation, US
9	Hitachi, Japan
10	Samsung, South Korea
11	Bloomberg, US

Table 1: IRCAI Partners in Developed Countries (non-exhaustive)

S. No.	Partners – Developing Countries
1	FGV-IDE, Brazil
2	University of Campinas – Unicamp, Brazil
3	Ghana-India Kofi Annan Centre of Excellence in ICT, Ghana
4	Ministry for Artificial Intelligence, UEA, Dubai
5	Tsinghua University, Beijing, China

Table 2: IRCAI Partners in Developing Countries (non-exhaustive)

S. No.	UNESCO Partners
1	UNESCO Chair on Artificial Intelligence. The partnership includes a network of 67 institutions and research centers world wide
2	UNESCO Chair in Analytics and Data Sciences, University of Essex, United Kingdom
3	Associated with the International Day for Universal Access to Information
4	Associated with WSIS review process
5	Associated with UNESCO Mobile Learning Week
6	Strategic partnerships with NGOs, Think Tanks, local and regional governments and research centers and labs

Table 3: IRCAI Partners within UNESCO networks (non-exhaustive)

29. The Centre’s Governing Board, with a representative of the Director General of UNESCO will work to enhance the international character of its work, and thus pave way for more and stronger partnerships with like-minded institutions and other UNESCO Member States.

Alignment with UNESCO’s Programmes

30. Under the integrated, comprehensive strategy approved by the General Conference, each category 2 centre shall contribute to the achievement of UNESCO’s strategic programme objectives and sectoral or intersectoral program priorities and themes. As per UNESCO 39/C5, the proposed Centre will directly contribute to the Communication and Information Sector’s mandate of addressing “emerging challenges which are inherent to technological development such as the Internet of Things, algorithmic decision- making and artificial intelligence, including the risks associated with

increased surveillance, profiling and data privacy, with the uncertain impact of big data and continued digitalization on communication, journalism, employment, equality and empowerment.”

31. The Centre would help the CI sector realize its mandate of “supporting relevant institutions in Member States that struggle to keep up with the tremendous pace of innovation and change. It will seek to counter the risk of growing digital and knowledge divides that could leave behind those who are relatively disadvantaged, such as people in Least Developed Countries (LDCs), women and girls, youth, people with disabilities and marginalized groups in all societies” and “to promote universal access to information through open and inclusive solutions and innovative use of information and communication technology (ICTs) for sustainable development”

32. IRCAL’s four objectives of research, capacity enhancement, advocacy and dissemination of knowledge of AI for SDGs aligns with UNESCO’s mandate of leveraging ICTs for sustainable development with a special emphasis on SDGs 4, 5, 8, 9, 10, 13, 16 and 17.

33. The Centre would holistically address cross-programme actions between Major Programme I - Education, Major Programme II - Natural sciences, Major Programme III - Social and Human Sciences and Major Programme V - Communication and Information Sector. The Centre is attuned to programmatic priorities such as the integration of activities linked to ICT in education and open educational resources, ICT in science and open access to scientific information, reducing digital divide and facilitating achievement of internet universality principles for a human rights based, open, accessible and multi-stakeholder Internet.

34. AI presents a potential for achieving the SDG 4 i.e. Quality Education for All, through deployment of Machine Learning, Machine Translation and Personalization Algorithms. The Centre will pioneer AI based tools to improve learning outcomes at all levels of education in accordance with action lines of the World Summit on the Information Society (WSIS).

35. In line with the 2030 Agenda for Sustainable Development and at UNESCO’s 39th session of the General Conference, the Centre has the vision to bridge digital and knowledge divide and remove economic, racial, cultural, gender, disability and linguistic disparities. It will further leverage the power of AI and the “Internet of things” as an effective tool in preventing violent extremism and fighting online misinformation and disinformation.

36. UNESCO’s **Global priority Africa** is supported by the Centre’s work in building partnerships in the African Machine Learning community, academic institutions like Ghana-India Kofi Annan Centre of Excellence in ICT, Ghana African Virtual University and Association of African Universities. The Centre will also be associated with social media communities such as Voices of Africa that help in knowledge dissemination. The Centre in partnership with UNESCO and Knowledge 4 All Foundation has undertaken a study for mapping the AI ecosystem in Africa. The map currently covers three clusters: i) Private sector - start-ups and accelerators; ii) University labs and public sector; iii) NGOs, CSOs, Think tanks, development project.

37. UNESCO’s **Global priority Gender** is extremely relevant in the context of development of artificial intelligence as algorithms trained on large datasets can incorporate and propagate gender biases present in the datasets. The Centre’s researchers will work towards developing automatic bias detection techniques that will help users of algorithms to identify gender biases in algorithmic decision making. The capacity enhancement efforts of the Centre will ensure that access to information and training for AI is strengthened for girls and women. The advocacy and dissemination efforts of the Centre will highlight the issue of gender digital divide and advocate for gender sensitive policy development.

38. The Centre has proposed research projects in areas of CI Sector’s strategic objectives. The list of projects is available in Appendix I.

39. The Centre has been a UNESCO partner several endeavours that include:

- i. UNESCO Chair in open technologies in OER in 2014
- ii. The 2nd World OER Congress in 2017
- iii. The UNESCO Recommendation on OER in 2018-2019, a policy document suited to further the development and expansion of OER in the interests of Member States achieving SDG 4
- iv. Participation of Jožef Stefan Institute's experts at the CI Sector's panel discussion on "Artificial Intelligence for Human Rights and SDGs: Fostering Multi-Stakeholder, Inclusive and Open Approaches" at the Internet Governance Forum at UNESCO in 2018
- v. Participation of Jožef Stefan Institute's experts and the Slovenian National Commission at the UNESCO Day Zero Event on Artificial Intelligence organized at Mozilla Foundation in 2018
- vi. Map of Developing Countries' AI ecosystem. The map covers low-middle income countries in 4 regions (Latin America/Caribbean, SSA, MENA, Asia). The map currently covers three clusters: i) Private sector - start-ups and accelerators; ii) University labs and public sector; iii) NGOs, CSOs, Think tanks, development project.

40. These specific objectives, along with the CI Sector's wider work in enabling universal access to information and knowledge, and open and inclusive solutions using ICTs for sustainable development are in synergy with the objectives of the proposed Category 2 Centre.

Administrative Capacity

41. The Centre's capacity to deliver on its various programs and activities is enhanced through the state of the art facilities available at JSI, Slovenia, where its offices will be located. These facilities include small, medium and large meeting areas, all equipped with the latest presentation technology. Reception areas and catering support are also available. JSI is located two kilometer from the city centre and easily accessible from the airport using public transportation.

42. IRCAI's staffing requirements can expand or contract based on activities to be undertaken, and is part of the in-kind support JSI is committing to the Centre.

Financial Sustainability

43. The plan for IRCAI has been detailed for the first 6 years of operation. The operation will start with the continuation of existing research projects for which the Centre has already secured funding for the period up to 2022 for an amount of 650,000 Euros per year. Most of the work in the first year of operation would be devoted to setting up the new operation with approximately 5.2 FTE (Figure 1: Gantt chart). In the second year the Programme2: policy development and Programme3: International collaboration and capacity building will start. After 3 years of operation, all programs and activities will be in operation and run by 19 people (17 researchers and 2 support staff). After 4th year, the International network with initial hubs should be operational and in Year 5, the sustainability would be established.

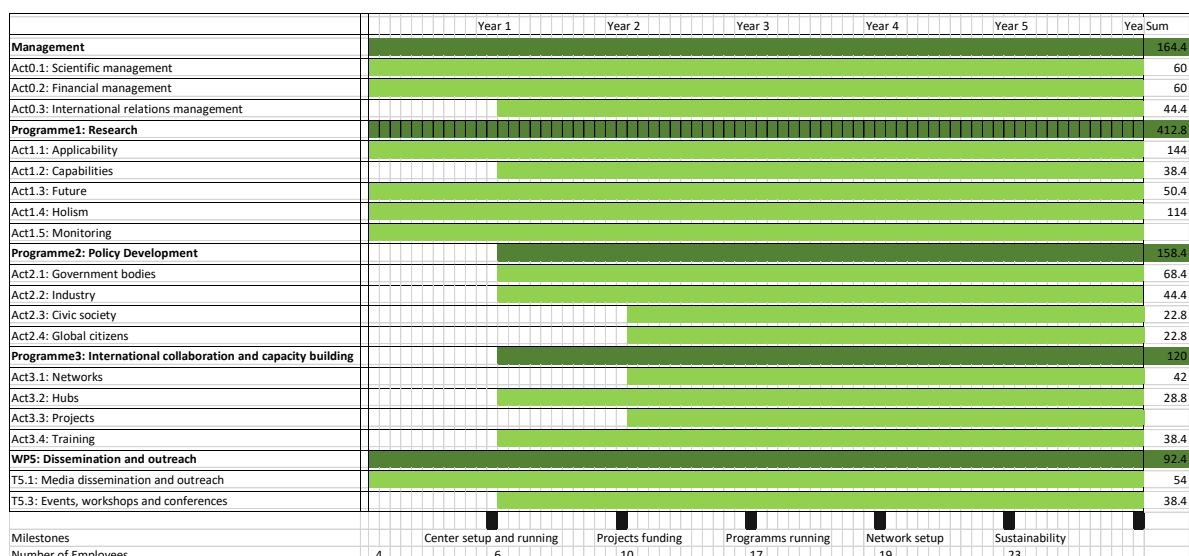


Figure 1: Gantt chart

44. The budget of the Centre will gradually increase from 610,000 Euros in the first year to a sustainable 3 million Euros in the sixth year. At the end of 5th year there will be 24.5 FTE employed (22.5 researchers and 2 support staff).

45. Table 4 shows the annual income and expenditure outlay of the Centre up to the year 2025. A provision has been made to hire expert consultants to complement the work done by the Centre's full time research and management staff.

Projection in €	2020	2021	2022	2023	2024	2025
Revenue	610,000.00	820,200.00	1,469,350.00	2,186,100.00	2,531,250.00	3,102,750.00
Costs – Goods, materials, services	20,000.00	40,000.00	60,000.00	100,000.00	100,000.00	150,000.00
Labour costs	462,000.00	627,750.00	1,128,750.00	1,752,750.00	1,957,500.00	2,298,750.00
Travel	37,800.00	53,100.00	94,500.00	152,100.00	171,000.00	202,500.00
Profit/Loss	60,200.00	49,350.00	86,100.00	81,250.00	102,750.00	201,500.00
Number of employees	4.2	5.9	10.5	16.9	19	22.5
Added value per employee	14,333.33	8,364.41	8,200.00	4,807.69	5,407.89	8,955.56
Number of support staff	1	1	2	2	2	2
Expert Contacts	30,000.00	50,000.00	100,000.00	100,000.00	200,000.00	250,000.00

Table 4: Centre's annual financial projection up to the year 2025

46. Table 5 presents the different sources of funding that the Centre will leverage to fund its operations and research. The diverse revenue stream will ensure that the Centre is not heavily reliant on one source of funding and spreads its financial risk.

Column1	2020	2021	2022	2023	2024	2025
JSI	500,000.00	500,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00
EU Grants	100,000.00	150,000.00	250,000.00	750,000.00	1,000,000.00	1,250,000.00
International grants		50,000.00	50,000.00	100,000.00	200,000.00	300,000.00
Consultancies			50,000.00	100,000.00	100,000.00	300,000.00
Sponsors		50,000.00	50,000.00	100,000.00	100,000.00	100,000.00
Events	10,000.00	10,000.00	20,000.00	50,000.00	50,000.00	50,000.00
SUM	610,000.00	760,000.00	1,420,000.00	2,100,000.00	2,450,000.00	3,000,000.00

Table 5: Centre's forecasted revenue streams and income statement

47. The Government would make available to the Centre necessary financial resources for its operation through extant funding arrangement with Josef Stefan Institute. Some of the Centre's projects are funded through EU grants and the Centre will continue to explore more funding opportunity with the EU. The projects under Centre for Knowledge Transfer in Information Technologies (CT3) that will be transferred to IRCAl will be funded through International, EU, and Governmental and Private Sector grants. A list of 70 projects undertaken by the Centre on AI since 2000 is available in Appendix 1.

48. Given the Centre's research capacity, it will offer consultancy services to governments starting from the third year of operation. The Centre will continue to pursue projects with private sector partners. Large events and conferences will form a portion of its revenues. The current Centre has organized more than 100 such events including 2nd World OER Congress, OCWC Global, LREC, Several European Semantic Web conferences, IJCAI, ISWC, KDD, AAAI workshops to mention a few.

Legal status

49. As per the provisions set out in UNESCO's Integrated Comprehensive Strategy for Category 2 Institutes and Centres (37 C/18 Part I) a category 2 centre may be granted to an existing entity or to an institution in the process of being created. In the case of JSI, the Centre will be created by transferring the functions of Centre for Knowledge Transfer in Information Technologies (CT3). The new Centre will be named "**International Research Centre on Artificial Intelligence (IRCAI)**". The Centre will thus retain its current research staff across several departments within JSI of more than 180 researchers, who are covering a wide spectrum of AI technologies. As stipulated by the General Conference, while category 2 centers are associated with UNESCO, they are legally outside the Organization. They enjoy legal and functional autonomy. Hence, UNESCO is not legally responsible for them and it shall bear neither responsibility nor liabilities of any kind, be it managerial, financial or otherwise.

50. IRCAl will be an entity in the territory of Slovenia with the legal status and capacity necessary for the exercise of its functions in accordance with Slovenian laws. The proposed Centre will be overseen by a Governing Board, which will include representatives of the Government of Slovenia, JSI, senior experts from public as well as private institutions within Slovenia, a representative of the Director-General UNESCO and other representatives from some Member States of UNESCO.

51. The Government of Slovenia and UNESCO will enter into an agreement defining the terms and conditions and other pertinent issues regarding IRCAl. All precautions will be taken to not deviate from the provisions set out in the UNESCO strategy and the model agreement. The draft agreement is part of Appendix 2.

Governance

52. IRCAl will be overseen by a Governing Board, which will include representatives of the Government of Slovenia, representatives from JSI, and representatives from Member States of UNESCO to ensure adequate representation of the developing regions of the world. The Governing Board will also include a representative of the Director General of UNESCO.

53. The Governing Board will undertake the following responsibilities:

- i. Draft its Rules of Procedure, in cooperation with UNESCO and the Government of Slovenia;
- ii. Approve its own Rules of Procedure;
- iii. Approve the long-term and medium-term programs of the Centre;

- iv. Approve the annual work plan and staffing table of the Centre;
- v. Adopt the rules and regulations and determine the financial, administrative and personnel management procedures of the Centre;
- vi. Decide on the participation of other organizations and entities; and
- vii. Examine the annual reports submitted by the Centre, including a biennial self-assessment of the Centre's contribution to UNESCO's programme objectives.

Conclusions

54. IRCAI would build on JSI's research depth and academic excellence on artificial intelligence, building on its understanding of the role that AI can play in shaping the future of humanity in achieving the Sustainable Development Goals.

55. As IRCAI further develops its methodology and programmes, synergies and collaborative partnerships will also evolve. For its part, UNESCO can exercise a catalytic function for the Institute's activities by lending its technical and organizational expertise, as well as providing access to its vast network (UNESCO Chairs/UNITWIN, ASPnet, field offices, category 1 and 2 institutes and centres, etc.). UNESCO can act as a bridge to other countries, international organizations and relevant NGOs working with the aim of fostering knowledge societies by leveraging the power of AI for sustainable development. IRCAI thus fits well with UNESCO's objectives in general and also adds to its two global priorities i.e. Africa and Gender in the field of Artificial Intelligence.

56. The regional, interregional and global impacts of IRCAI are significant. Given its intention to form strategic networks with other existing institutes or centres, it is evident that it would expand UNESCO's significance in the global landscape on AI. It is well-positioned to contribute to policy advice, capacity-building and North-North and North-South cooperation.

57. Concerning the financial sustainability of the Centre, it already has assured finance of 610,000 Euros, which is foreseen to almost double every year. It must also be noted that there is other anticipated financial support from fundraising, research grant, and from co-development of projects.

58. The legal, financial and administrative aspects of the proposed Centre conform to the provisions of the draft model agreement contained in the revised integrated strategy on Category 2 Centre and institutes (37/C-18/PART_I). The draft agreement also conforms to the applicable Government of Slovenia laws and regulations.

59. Based on the findings of the feasibility study, the proposal fulfils and complies with the guidelines and criteria regarding the establishment of relations between UNESCO and the institutes and centres to be placed under its auspices, as stipulated by the General Conference in 37 C/Resolution 93. The proposed Category 2 Centre as described in this study fits well with UNESCO's strategic and programmatic objectives, and corresponds to the 39C/5 Expected Result 5 of Major Programme V. The establishment of the International Research Centre for Artificial Intelligence as a UNESCO Category 2 Centre is therefore recommended.

Appendix I

List of Projects Undertaken by the Centre on AI since 2000

1. SOL-EU-NET FP5 RTD project: Data Mining and Decision Support for Business Competitiveness: Solomon European Virtual Enterprise (IST-1999-11495)(2000-2003)
2. KNet FP5 Network of Excellence: European Knowledge Discovery Network of Excellence (IST-2001-33086)(2002-2004)
3. KMForum FP5 Network of Excellence: European Knowledge Management Forum (IST-2000-26393)(2000-2003)
4. NEMIS FP5 Network of Excellence: Network of Excellence in text Mining and its applications in Statistics (IST-2001-37574)(2002-2004)
5. NeOn FP6 Integrated project: Lifecycle Support for Networked Ontologies (IST-4-027595-IP)(2006-2010)
6. SMART FP6 Strategic targeted research project: Statistical Multilingual Analysis for Retrieval and Translation (IST-5-033917-STP)(2007-2010)
7. IMAGINATION FP6 Strategic targeted research project: Image-based Navigation in Multimedia Archives (IST-5-034626-STP)(2007-2010)
8. SWING FP6 Strategic targeted research project: Semantic Web Services Interoperability for Geospatial Decision Making (IST-4-026514-STP)(2006-2009)
9. TAO FP6 Strategic targeted research project: Transitioning Applications to Ontologies (IST-4-026460-STP)(2006-2009)
10. E4 FP6 Strategic targeted research project: Extended Enterprise management in Enlarged Europe (IST-4-027282-STP)(2006-2008)
11. Tool-East FP6 Strategic targeted research project: Open Source Enterprise Resource Planning and Order Management System for Eastern European Tool and Die Making Workshops (IST-4-027802-STP)(2006-2007)
12. KD-ubiq FP6 Co-ordination Action: A blue print for ubiquitous knowledge discovery systems (IST-4-021321-CA)(2005-2008)
13. IST World FP6 Specific Support Action: Knowledge Base for RTD competencies in IST (IST-3-015823-SAS)(2005-2007)
14. WS DEBATE FP6 Specific Support Action: Stimulating Policy Debate on Women and Science Issues in Central Europe (SAS-2006-036651-SSA)
15. SEKT FP6 Integrated project: Semantically Enabled Knowledge Technologies (IST-1-506826-IP)(2004-2006)
16. ALVIS FP6 Strategic targeted research project: Superpeer Semantic Search Engine (IST-1-002068-STP)(2004-2006)
17. PASCAL FP6 Network of Excellence: Pattern Analysis, Statistical Modelling and Computational Learning (IST-1-506778-NOE)(2003-2007)
18. CEC-WYS FP6 ERA project: Central European Centre for Women and Youth in Science (SAS6-CT-2004-003582)(2004-2006)
19. FI-IMPACT FP7 Coordination and support action: Future Internet Impact Assurance (FP7-ICT-FI-632840)(2014-2016)
20. SUNSEED FP7 Collaborative project: Sustainable and robust networking for smart electricity distribution (FP7-ICT-619437) (2014-2017)
21. XLime FP7 Collaborative project: crossLingual crossMedia knowledge extraction (FP7-ICT-611346) (2013-2016)
22. COMET FP7 Collaborative project: Complex Contextualization of Mobile Apps with Open Governmental Data (FP7-ICT-611655) (2013-2015)
23. ProaSense FP7 Collaborative project: The Proactive Sensing Enterprise (FP7-ICT-612329) (2013-2016)
24. SYMPHONY FP7 Collaborative project: Orchestrating Information Technologies and Global Systems Science for Policy Design and Regulation of a Resilient and Sustainable Global Economy (FP7-ICT-611875) (2013-2016)
25. MEDIAMIXER FP7 Coordination and support Action: Community set-up and networking for the reMIxing of online MEDIA fragments (FP7-ICT-318101-CSA) (2012-2014)

26. MOBIS FP7 Collaborative project: Personalized Mobility Services for energy efficiency and security through advanced Artificial Intelligence techniques (FP7-ICT-318452) (2012-2015)
27. NRG4Cast FP7 Collaborative project: Energy Forecasting (FP7-ICT-600074) (2012-2015), coordinated by JSI-AILab
28. SOPHOCLES FP7 STREP: Self-Organised information PrOcessing, Criticality and Emergence in multilevel Systems (FP7-317534-STREP) (2012-2015)
29. TOPOSYS FP7 STREP: Topological Complex Systems (FP7-ICT-318493-STREP) (2012-2015), coordinated by JSI-AILab
30. LT-Web FP7 Support Action: Language Technologies in the Web (FP7-ICT-287815 -CSA) (2012-2014)
31. Translectures FP7 STREP: Transcription and Translation of Video Lectures (FP7-ICT-287755-STREP) (2011-2014)
32. XLike FP7 STREP: Cross Lingual Knowledge Extraction (FP7 -ICT-288342- STREP) (2012-2014), coordinated by JSI-AILab
33. ESC FP7 Coordination and support Action: European Security Challenge (2011-2012)
34. SiS CATALYST FP7 Support Action: Children as Change Agents for Science in Society (2011-2014)
35. RENDER FP7 Specific targeted research project: Reflecting Knowledge Diversity (ICT-257790-STREP) (2010-2013)
36. ALERT FP7 Specific targeted research project: Active Support and Real-time Coordination based on Event processing in FLOSS development (ICT-249119-STREP)(2010-2013)
37. Planetdata FP7 Network of Excellence: Intelligent Information Management (ICT -257641 -NoE) (2010-2014)
38. MultiLingualWeb FP7 Coordinated Action: Advancing the Multilingual Web (FP7-ICT-250500-CSA) (2010-2012)
39. MetaNet FP7 Network of Excellence: Technologies for the Multilingual European Information Society (FP7-ICT-249119-NoE) (2010-2013)
40. ENVISION FP7 Collaborative Project: Environmental Services Infrastructures with ontologies (ICT -249120 – CP) (2010-2012)
41. GENDERA FP7 Support Action: Gender debate in the European Research Area (ICT-244499) (2009-2012)
42. VIDi FP7 eParticipation: Visualising the Impact of the Legislation (2009-2010)
43. PASCAL2 FP7 Network of Excellence: Pattern Analysis, Statistical Modeling and Computational Learning 2 (ICT-216886-NOE) (2008-2013)
44. ACTIVE FP7 Integrated project: Enabling the Knowledge Powered Enterprise (ICT-215040-IP) (2008-2011)
45. EURIDICE FP7 Integrated project: European Inter-Disciplinary Research on Intelligent Cargo for Efficient, Safe and Environment-friendly Logistics (ICT-216271-IP) (2008-2011)
46. COIN FP7 Integrated project: Enterprise COllaboration & INteroperability (2008-216256) (ICT-216271-IP)
47. CyberSANE H2020 Innovation Action: Cyber Security Incident Handling, Warning and Response System for the European Critical Infrastructures (H2020-SU-ICT-833683)
48. Humane AI H2020 FET FLAGSHIP: Toward AI Systems That Augment and Empower Humans by Understanding Us, our Society and the World Around Us (H2020-FETFLAGSHIP-SEP-210503559)
49. FIN-TECH H2020 Coordination and Support Action: A FINancial supervision and TECHnology compliance training programme (H2020-ICT-SEP-210487666)
50. EniviroLENS H2020 Innovation Action: Copernicus for environmental law enforcement support (H2020-DT-SPACE-SEP-210488350)
51. AI4EU H2020 Research and Innovation action: A European AI On Demand Platform and Ecosystem (H2020-ICT-SEP-210487933)
52. Cleopatra H2020 MSCA-ITN-ETN: Cross-lingual Event-centric Open Analytics Research Academy (H2020-MSCA-ETN-812997)
53. COG-LO H2020 Research and Innovation action: Future COGNitive Logistics Operations through Social Internet of Things (H2020-MG-769141-1)

54. SILKNOW H2020 Research and Innovation action: Silk heritage in the Knowledge Society: from punched cards to big data, deep learning and visual / tangible simulations (H2020- CULT-COOP-769504-1) (2018-2021)
55. PerspectiveSentinel H2020 Research and Innovation Action: BIG DATA knowledge extraction and re-creation platform (H2020-EO-776115) (2018-2020)
56. ELEXIS H2020 INFRAIA: European Lexicographic Infrastructure (H2020-INFRA-731015), JSI coordinator (2018-2022)
57. DataBench H2020 Research and Innovation Action: Evidence Based Big Data Benchmarking to Improve Business Performance (H2020-ICT-780966) (2018-2021)
58. TheyBuyForYou H2020 Innovation Action: Enabling procurement data value chains for economic development, demand management, competitive markets and vendor intelligence (H2020-ICT-780247)(2018-2021)
59. x5Gon H2020 Innovation Action: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network (H2020-ICT-761758) (2017-2020)
60. Water4Cities H2020 MSCA-RISE: Holistic Surface Water and Groundwater Management for Sustainable Cities (H2020-MSCA-RISE-734409)(2017-2021)
61. PrEstoCloud H2020 Cloud Computing: Proactive Cloud Resources Management at the Edge for Efficient Real-Time Big Data Processing (H2020-ICT-732339)(2017-2019)
62. euBusinessGraph H2020 Big Data PPP: Enabling the European Business Graph for Innovative Data Products and Services (H2020-ICT-732006)(2017-2019)
63. EW-Shopp H2020 Big Data PPP: Supporting Event and Weather-based Data Analytics and Marketing along the Shopper Journey (H2020-ICT-732590)(2017-2019)
64. MOVING H2020 INSO: Training towards a society of data-savvy information professionals to enable open leadership innovation (H2020-INSO-693092)(2016-2019)
65. GlobalDNA H2020 MSCA-IF: Dynamic Network Analysis of Global News Events (H2020-MSCA-IF-660484)(2016-2019)
66. RENOIR H2020 MSCA-RISE: Reverse EngiNeering of sOcial Information pRocessing (H2020-MSCA-RISE-691152)(2016-2019)
67. BigDataFinance H2020 MSCA-ITN-ETN: Training for Big Data in Financial Research and Risk Management (H2020-MSCA-ITN-675044)(2015-2019)
68. OPTIMUM H2020 Research and Innovation Action: Multi-source Big Data Fusion Driven Proactivity for Intelligent Mobility (H2020-MG-636160)(2015-2017)
69. AQUASMART H2020 Innovation Action: Aquaculture Open Data Cloud Innovation (H2020-ICT-644715) (2015-2016)
70. EDSA H2020 Coordination and support Action: European Data Science Academy (H2020-ICT-643937) (2015-2017)

APPENDIX II

DRAFT

Agreement between the United Nations Educational, Scientific and Cultural Organization and the Government of Slovenia regarding the establishment of the

International Research Centre on Artificial Intelligence at JSI, Ljubljana under the auspices of UNESCO

The Government of the Republic of Slovenia

and

The United Nations Educational, Scientific and Cultural Organization,

Having regard to the resolution whereby the UNESCO General Conference seeks to favour international cooperation in respect of International Research Centre on Artificial Intelligence (IRCAI) at Jožef Stefan Institute in Ljubljana, Slovenia as a Category 2 Centre under the auspices of UNESCO,

Considering that the Director-General has been authorized by the General Conference to conclude with the Government of the Republic of Slovenia an agreement in conformity with the draft that was submitted to the General Conference,

Desirous of defining the terms and conditions governing the framework for cooperation with UNESCO that shall be granted to the said Institute/Centre in this Agreement,

HAVE AGREED AS FOLLOWS:

Article 1 – Definitions

1. In this Agreement, “UNESCO” refers to the United Nations Educational, Scientific and Cultural Organization.
2. The “Government” refers to the Government of Republic of Slovenia
3. “Centre” means The International Research Centre on Artificial Intelligence

Article 2 – Establishment

The Government shall agree to take, in the course of the year 2020, any measures that may be required for the establishment of International Research Centre on Artificial Intelligence (IRCAI) at Jožef Stefan Institute, Ljubljana, Slovenia into a Category 2 Centre under the auspices of UNESCO, as provided for under this Agreement, hereinafter referred to as “the Centre”.

Article 3 – Purpose of the Agreement

The purpose of this Agreement is to define the terms and conditions governing collaboration between UNESCO and the Government concerned and also the rights and obligations stemming therefrom for the parties.

Article 4 – Legal status

4.1 The Centre shall be independent of UNESCO.

4.2 The Government shall ensure that the Centre enjoys within its territory the functional autonomy necessary for the execution of its activities and the legal capacity:

to contract;

to institute legal proceedings;

to acquire and dispose of movable and immovable property.

Article 5 – Constitutive Act

The constitutive act of the Centre must include provisions describing precisely:

- a) the legal status granted to the Centre, within the national legal system, the legal capacity necessary to exercise its functions and to receive funds, obtain payments for services rendered, and acquire all means necessary for its functioning;
- b) a governing structure for the Centre allowing UNESCO representation within its governing body.

Article 6 – Objectives

The objectives of the Centre shall be to:

- (a) conduct theoretical and applied research in the field of artificial intelligence and digital technologies;
- (b) develop open solutions to help achieve Sustainable Development Goals with specific focus on SDGs 4, 5, 8, 9, 10, 13, 16 and 17;
- (c) provide policy support to help Member States address the technical, legal, social and ethical challenges at the intersection of technology and policy;
- (d) provide training for upstream and downstream capacity enhancement for artificial intelligence;
- (e) encourage multi stakeholder participation and decision making in addressing the challenges raised by artificial intelligence;
- (f) disseminate information and encourage literacy about artificial intelligence;
- (g) promote measures for removal of gender bias in the development and deployment of artificial intelligence;
- (h) facilitate north-north and north-south cooperation in the development of artificial intelligence with special emphasis on supporting the development of a vibrant artificial intelligence ecosystem in Africa

Article 7 – Governing Board

1. The Centre shall be guided and overseen by a Governing Board (or comparable body) renewed every 2 years and include:

- (a) a representative of the Government concerned or his/her appointed representative;

- (b) a representative of the Director-General of UNESCO;
- (c) a representative of the Slovenian National Commission for UNESCO;
- (d) a representative of the Jožef Stefan Institute, Ljubljana, Slovenia;
- (e) representatives of up to 3 other Member State of UNESCO, which have sent to the Centre notification for membership, in accordance with the stipulations of article 10, paragraph 2 and have expressed interest in being represented on the Board;
- (f) two representatives from universities based in Slovenia;

2. The Governing Board shall:

- (a) approve the long-term and medium-term programmes of the Centre;
- (b) approve the annual work plan of the Centre, including the staffing table;
- (c) examine the annual reports submitted by the director of the Centre, including a biennial self-assessment reports of the Centre's contribution to UNESCO's programme objectives;
- (d) examine the periodic independent audit reports of the financial statements of the Centre and monitor the provision of such accounting records necessary for the preparation of financial statements;
- (e) adopt the rules and regulations and determine the financial, administrative and personnel management procedures for the Centre in accordance with the laws of the country;
- (f) decide on the participation of regional intergovernmental organizations and international organizations in the work of the Centre.

3. The Governing Board shall meet in ordinary session at regular intervals, at least once every calendar year; it shall meet in extraordinary session if convened by its Chairperson, either on his/her own initiative or at the request of the Director-General of UNESCO or of two-thirds of its members.

4. The Governing Board shall adopt its own rules of procedure. For its first meeting the procedure shall be established by the Government and UNESCO.

Article 8 – UNESCO's contribution

1. UNESCO may provide assistance, as needed, in the form of technical assistance for the programme activities of the Centre, in accordance with the strategic goals and objectives of UNESCO by:

- (a) providing the assistance of its experts in the specialized fields of the Centre; (and/or)
- (b) engaging in temporary staff exchanges when appropriate, whereby the staff concerned will remain on the payroll of the dispatching organizations; (and/or)
- (c) seconding members of its staff temporarily, as may be decided by the Director-General on an exceptional basis if justified by the implementation of a joint activity/project within a strategic programme priority area.

2. In all the cases listed above, such assistance shall not be undertaken except within the provisions of UNESCO's programme and budget, and UNESCO will provide Member States with accounts relating to the use of its staff and associated costs.

Article 9 – Contribution by the Government

1. The Government shall provide all the resources, either financial or in kind, needed for the administration and proper functioning of the Centre.
2. The Government undertakes to:
 - (a) make available to the Centre premises for its activities; and
 - (b) entirely assume responsibility for the maintenance of the premises of the Centre, and
 - (c) make available to the Centre necessary financial resources for its operation through a funding arrangement with Josef Stefan Institute; and
 - (d) make available to the Centre the administrative staff necessary for the performance of its functions, which shall comprise: research, policy development, training and outreach.

Article 10 – Participation

1. The Centre shall encourage the participation of Member States and Associate Members of UNESCO which, by their common interest in the objectives of the Centre, desire to cooperate with the Centre.
2. Member States and Associate Members of UNESCO wishing to participate in the Centre's activities, as provided for under this Agreement, shall send to the Centre notification to this effect. The director shall inform the Parties to the Agreement and other Member States of the receipt of such notifications.

Article 11 – Responsibility

As the Centre is legally separate from UNESCO, the latter shall not be legally responsible for the acts or omissions of the Centre, and shall also not be subject to any legal process, and/or bear no liabilities of any kind, be they financial or otherwise, with the exception of the provisions expressly laid down in this Agreement.

Article 12 – Evaluation

1. UNESCO may, at any time, carry out an evaluation of the activities of the Centre in order to ascertain:
 - (a) whether the Centre makes a significant contribution to the UNESCO's strategic programme objectives and expected results aligned with the four-year programmatic period of C/5 document (Programme and Budget), including the two global priorities of UNESCO, and related sectoral or programme priorities and themes;
 - (b) whether the activities effectively pursued by the Centre are in conformity with those set out in this Agreement.
2. UNESCO shall, for the purpose of the review of this Agreement, conduct an evaluation of the contribution of the Centre to UNESCO strategic programme objectives, to be funded by the host country or Centre.
3. UNESCO undertakes to submit to the Government, at the earliest opportunity, a report on any evaluation conducted.

4. Following the results of an evaluation, each of the Parties shall have the option of requesting a revision of the contents of the agreement or of denouncing the Agreement, as envisaged in Articles 16 and 17.

Article 13 – Use of UNESCO name and logo

1. The Centre may mention its affiliation with UNESCO. It may therefore use after its title the mention “under the auspices of UNESCO”.
2. The Centre is authorized to use the UNESCO logo or a version thereof on its letterheaded paper and documents including electronic documents and web pages in accordance with the conditions established by the governing bodies of UNESCO.

Article 14 – Entry into force

This Agreement shall enter into force, following its signature by the Parties, when they have informed each other in writing that all the formalities required to that effect by the domestic law of the Republic of Slovenia and by UNESCO’s internal regulations have been completed. The date of receipt of the last notification shall be deemed to be the date of entry into force of this Agreement.

Article 15 – Duration

This Agreement is concluded for a period of six years as from its entry into force. - The Agreement shall be renewed upon common agreement between Parties once the Executive Board made its comments based on the results of the renewal assessment provided by the Director-General. .

Article 16 – Denunciation

1. Each of the Parties shall be entitled to denounce this Agreement unilaterally.
2. The denunciation shall take effect within 30 days following receipt of the notification sent by one of the contracting parties to the other.

Article 17 – Revision

This Agreement may be revised by written consent between the Government and UNESCO.

Article 18 – Settlement of disputes

1. Any dispute between UNESCO and the Government concerning the interpretation or application of this Agreement, if not settled by negotiation or any other appropriate method agreed to by the parties, shall be submitted for final decision to an arbitration tribunal composed of 3 members, one of whom shall be appointed by the Government, another by the Director-General of UNESCO, and a third, who shall preside over the tribunal, shall be chosen by the first two. If the two arbitrators cannot agree on the choice of a third, the appointment shall be made by the President of the International Court of Justice.
2. The Tribunal’s decision shall be final.

IN WITNESS WHEREOF, the undersigned have signed this Agreement,

DONE in [...] copies in the [...] languages, on [...]

.....
For the United Nations Educational,
Scientific and Cultural Organization

.....
For the Government