

X Modal X Cultural X Lingual X Domain X Site Global OER Network

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LIST OF ABBREVIATIONS

AI	Artificial Intelligence
API	Application Program Interface
EC	European Commission
IDRC	International Development Research Centre
IPR	Intellectual Property Rights
PLA	Peer Learning Activity
SDG	Sustainable Development Goal
UNESCO	United Nations Educational, Scientific and Cultural Organization

ABSTRACT

X5GON is a project funded by the European Commission through the H2020 Programme for research and technological development. The consortium contains 8 partners from 5 European countries (Slovenia, Germany, Spain, France, and UK). Launched on 1 September 2017 by a consortium made up of four European universities University College London (UCL), Universitat Politècnica De València (UPV), Université De Nantes (NA), Universitaet Osnabrueck (UOS), a research focused institute, the Institute Jozef Stefan (JSI), an industrial and for-profit partner Post office Slovenia (PS), a not-for-profit Knowledge 4 All Foundation Ltd (K4A), and the Government of the Republic of Slovenia via the public body Slovenian Ministry of Education, Science and Sport. It will run until 31 December 2020.

This deliverable is part of WP7 covering dissemination and public outreach of the X5GON project. It includes a number of intersecting tasks including Creation and sustainability of project online presence (Task 7.1), communication with the public and networking (Task 7.2), governments and disabled communities (Task 7.3), and communication with businesses and exploitation communities (Task 7.4).

Therefore, D7.4 is designed to deliver and reflect on these tasks on a wider community level and in essence pinpoint with precision the public perceptions of AI and Education in relation to OER and to react and present in a positive, and transparent way the potential and results of the X5GON project.

First, the aim of this deliverable is to present the complete XGON participation in online, external learning and dissemination events, dissemination of the marketing materials, and the feedback received. A longevity plan outlines successful achievements and their potential adoption by new projects and collaborations.

Second, it aims to present the Final Plan for the Dissemination and Exploitation of the project results (PEDR) is the third and final version of the PEDR and reports on the consortium's strategy and specific actions to disseminate and protect the foreground generated within the project, aiming at maximizing the project's impact through selected effective communication channels, raise public awareness and widely spreading the project objectives and important results within the research community, academia, OER providers and the general public.

Third, it is the continuation of D7.3 and a supplement to D8.4 describing the final business plan. In Year 3 (M24-M36) activities were focused on amplifying the project's research results and final technological infrastructure, alongside the offerings to OER sites along with policy actions building towards scientific impact, through participations at conferences and in scientific publications; these activities were mainly addressed by the academic partners.

Finally, the deliverable is structured in the following four chapters. The first section includes introductory information about the scope and objectives of the dissemination and exploitation activities within the X5GON project. The second section presents the updated Dissemination and Exploitation Plan (reported in details in D8.4) as well as the dissemination objectives set for this final period, while the third section presents the overall performed dissemination and planned exploitation activities. The fourth section focuses on the concluding remarks of the deliverable. Finally, the last chapter includes the complete UNESCO Recommendation on OER as officially stipulated by the UN agency and helped being drafted by X5GON partners.

1. INTRODUCTION

1.1 SCOPE OF DISSEMINATION ACTIVITIES

The X5GON project results hold a significant impact on the future of AI with and more specifically machine learning methods, to significantly support the area of open education and open educational resources (see Appendix 1). Besides the publishing industry, it also can be used in the sector for digestion of large document archives, which comes through as well in document management systems outside of the publishing industry.

During the three years' activities in WP7 and combined with WP8 focused on the creation of effective public and specialized channels and tools towards raising public awareness for the project objectives and results within our target groups. The aim was to reach the full range of potential end users and keep them informed about the X5GON actions and attract them into a partnership.

During the past three years we have been developing the X5GON PEDR, following the project's lifetime, and responding to the partners' needs and external opportunities. The realized and foreseen activities of the X5GON PEDR were reported and evaluated on a periodic basis, in order to allow an effective monitoring, management and coordination of future actions.

1.2 OBJECTIVES OF THIS DELIVERABLE

The dissemination and communication activities delivered until M36 aimed at closely following and focusing upon the research, technical and policy progress of the X5GON project. In order to attract the relevant stakeholder's interests in the significant outcomes of the project, the consortium established a dissemination timeline based on the development stages of the main results and of the dissemination needs and objectives of the project at each stage of the project lifecycle, as follows:

Year 1 (M1-M12):

- Initial work started and results were primarily focused on technical Work Packages.
- Communication activities focused mainly on introductory and buy-in descriptions of the project's scope and expected results (e.g. project and platform website, leaflets, etc.).
- X5GON profile begins to shape in policy and OER communities, while visibility is increased and exploitation activities start to shape.

Year 2 (M12-M24):

- Technical progress has produced a set of assets such as Platform, Products, Tools and Services (see details in D8.4 and D2.5) with actual results and the major scientific directions and questions were resolved.
- Dissemination activities are more frequent and extended towards specific industrial audiences like SMEs, start-ups, enterprises, multinational companies, and scientific audiences.
- X5GON profile begins to shape in industrial setting and scientific papers and journals, while visibility is high in policy increased and exploitation activities start to have impact.

Year 3 (M24-M36):

- Scientific impact of the project is becoming relevant and help shape the technologies further and beyond the state-of-the-art to maximize output.

- Dissemination as demonstrators and end-user results are already available, and focused on people with disabilities.
- X5GON profile is on its highest levels in all target groups.

2. X5GON DISSEMINATION RESULTS

2.2 COLLECTION OF INPUTS AND ACTIONS

The X5GON PEDR has been created based on the standard forms being used in the Participant Portal for the Scientific Reporting of the project and is being composed of the following sections. The X5GON PEDR has been circulated and updated since the beginning of the project, M6, M12, M18, M24, M30 and M36. In overall, the objectives of the X5GON PEDR are to:

- Harvest information on the partners' planned actions in a standardized format
- Monitor activities for specific target groups
- Identify dissemination trends and pursue major opportunities
- Confirm a continuous and standard flow of disseminating information
- Maintain an overview of the project's dissemination portfolio

2.3 TARGET GROUPS

During the 3 years we effectively communicated the information to the relevant and interested audiences in a concise, well-articulated, understandable and attractively packaged manner. It is worth highlighting that the disseminated/communicated messages is adapted to each of the related target groups, in order to ensure an effective outreach strategy and successfully achieve the corresponding objectives. Based on the analysis performed for the identification of the X5GON final and updated target groups (see D8.1 for details):

- **European and world citizens have a need for access to open education** that is not constrained by content, culture, location, language and technological barriers. X5GON solves this with an OER platform comprised of at least two services for all types of open educational resources;
- **OER providers need to achieve impact and meaningful usage** of their OER content. X5GON will create a high quality analytics recommendation services for OER data that is content, culture, location, language independent in nature and addresses all OER types and genres;
- **Educators need access to high quality OER** with the ability to tell if something is a good resource, with a minimal time to get to a good resource. X5GON will create ML quality assurance of resources and maximise time efficiency;
- **AI researchers need a platform for promoting, testing and comparing their algorithms, methods and solutions.** The X5GON pre-processing pipeline is an open-source platform and will provide a workbench for integrating novel ML solutions dealing with OER materials;
- **OER and Edtech engineers need access to robust, accurate and wide-coverage technological infrastructure**, especially for openly licensed materials, following the ethos of openness in OER, OA, open data, etc. The X5GON infrastructure provides exploitation, content enrichment, and availability of a robust API, and will service the community with support and techniques to scale, use and add to the platform;
- **The European Commission and Ministries of Education** across Europe and the world **lack technological solutions for creating equity** by

producing, advocating OER and its potential. X5GON provides a valid example for such a showcase on a European and global level.

- **People with disabilities are in need of AI solutions for integration** to promote equal opportunities for people with disabilities at EU level.
- **Companies with large numbers of documents needing CMS solutions, for** teams spread across Europe, the U.S and Latin America, different time zones, numerous languages, cultural barriers may all seem like obstacles at first, but really they're part of the reason we're successful.

2.5 ACTIVITIES PERFORMED

The listed target groups have been addressed through the following dissemination instruments and activities:

- The project's public platform website is the main dissemination tool of the project, with constant updates on the achievements and dissemination activities;
- The technical and platform website is the main entry point for OER sites and has been designed to present all functioning components. It is constantly being updated and will be throughout this period with information about the major project results focusing on transfer of research into industry and communities of practice;
- Communication material (flyers, posters, overview presentation) which were distributed and/or displayed by the partners in order to support their dissemination activities;
- Scientific publications and presentations targeting key journals and conferences;
- Participation in workshops, conferences, governmental and inter-governmental events.

As part of our strategy we chose not to engage with X5GON Social Media groups and pages (Facebook group, LinkedIn group, Twitter account, YouTube channel) as it was much more effective to ask partners joining the X5GON network to share releases.

3. PERFORMED REAL-WORLD COMMUNITY ENGAGEMENT AND DISSEMINATION ACTIVITIES

The following section presents the project's dissemination activities realized during the first two years of the project, as well as a list of the planned exploitation activities and assets. In the Appendix we also include the full list of all performed and planned dissemination and exploitation activities. Since dissemination and communication activities promote the project research but also the scientists and partner institutions driving this research, these activities enhance knowledge sharing and the design of innovation, while they also contribute to the European excellence by enhancing the scientific and industrial profile of the European research and development. The activities mainly include publications in highly ranked journals and participation in high-impact scientific, policy and community events, and to spread the project research and results to various communities of relevance, towards enhancing its scientific impact. Below we list the project's dissemination activities delivered in the first two years of the project.

3.1 LIST OF PERFORMED/PLANNED SCIENTIFIC PUBLICATIONS (M1-M36)

A. Publication in conference proceeding/workshop:

1. S. Kreitmayer (UCL), Y. Rogers (UCL), J. Shawe-Taylor (UCL), Design in the Wild: Interfacing the OER learning journey, The Chartered Institute for IT (ACM Proceedings), 32nd Human Computer Interaction Conference, May 2018
2. F. Ollermann (UOS) Anforderungen von Lehrenden an ein OER-Portal für Hochschulen, virtUOS Working Papers, Osnabrück, Germany, December 2018
3. S. Kreitmayer (UCL), Novel interfaces to support engagement and reflection in personalised online learning, Learning @ Scale 2018, London, UK, June 2018
4. S. Kreitmayer (UCL), 2019. Accepted workshop contribution paper, Paper: Future Learner Experiences with AI and Open Educational Resources, Workshop: Towards a Responsible Innovation Agenda for HCI – CHI 2019, Glasgow, UK, May 2019
5. Sahan Bulathwela (UCL), Emine Yilmaz (UCL), John Shawe Taylor (UCL), Towards Automatic, Scalable Quality Assurance in Open Education, IJCAI 2019, August 2019, Macau, China 2019
6. Iranzo-Sánchez, Javier; Garcés Díaz-Munío, Gonçal V; Civera, Jorge; Juan, Alfons. The MLLP-UPV Supervised Machine Translation Systems for WMT19 News Translation Task. In Proc. of Fourth Conference on Machine Translation (WMT19), Florence (Italy), 2019.
7. Baquero-Arnal, Pau; Iranzo-Sánchez, Javier; Civera, Jorge; Juan, Alfons. The MLLP-UPV Spanish-Portuguese and Portuguese-Spanish Machine Translation Systems for WMT19 Similar Language Translation Task. In Proc. of Fourth Conference on Machine Translation (WMT19), Florence (Italy), 2019.
8. Jorge, Javier; Giménez, Adrià; Iranzo-Sánchez, Javier; Civera, Jorge; Sanchis, Albert; Juan, Alfons. Real-time One-pass Decoder for Speech Recognition Using LSTM Language Models Inproceedings. In Proc. of the 20th Annual Conf. of the ISCA (Interspeech 2019), Graz (Austria), 2019.
9. Iranzo-Sánchez, Javier; Baquero-Arnal, Pau; Garcés Díaz-Munío, Gonçal V; Martínez-Villaronga, Adrià; Civera, Jorge; Juan, Alfons. The MLLP-UPV German-English Machine Translation System for WMT18. In Proc. of the Third Conference on Machine Translation (WMT18), Volume 2: Shared Task Papers, pp. 422–428, Brussels (Belgium), 2018.
10. Del-Agua, Miguel Ángel ; Giménez, Adrià ; Sanchis, Alberto ; Civera, Jorge; Juan, Alfons. Speaker-Adapted Confidence Measures for ASR using Deep Bidirectional Recurrent Neural Networks. IEEE/ACM Transactions on Audio, Speech, and Language Processing, 26 (7), pp. 1194–1202, 2018.
11. Jorge, Javier; Martínez-Villaronga, Adrià ; Golik, Pavel ; Giménez, Adrià ; Silvestre-Cerdà, Joan Albert ; Doetsch, Patrick ; Císcar, Vicent Andreu ; Ney, Hermann ; Juan, Alfons ; Sanchis, Albert. MLLP-UPV and RWTH Aachen Spanish ASR Systems for the IberSpeech-RTVE 2018 Speech-to-Text Transcription Challenge. In Proc. of IberSPEECH 2018: 10th Jornadas en Tecnologías del Habla and 6th Iberian SLTech Workshop, pp. 257–261, Barcelona (Spain), 2018.
12. Erik Novak, Preferences of Users in OER Recommendations, SiKDD 2019, Ljubljana, Slovenia 2019
13. Sahan Bulathwela, Emine Yilmaz, John Shawe Taylor, Towards an Integrative Educational Recommender for Lifelong Learners (Student Abstract), <https://doi.org/10.1609/aaai.v34i10.7151>, AAAI 2020, New York, USA, 2019

14. Sahan Bulathwela, Emine Yilmaz, John Shawe Taylor, TrueLearn: A Family of Bayesian Algorithms to Match Lifelong Learners to Open Educational Resources, <https://doi.org/10.1609/aaai.v34i01.5395>, AAAI 2020, New York, USA, 2019
15. Sahan Bulathwela, Davor Orlic, Colin de la Higuera, Emine Yilmaz, John Shawe Taylor, SUM'20: State-based User Modelling, <https://doi.org/10.1145/3336191.3371883>, WSDM 2020, ACM, Houston, TX, USA, 2019
16. Sahan Bulathwela, Stefan Kreitmayer, What's in it for me?: Augmenting Recommended Learning Resources with Navigable Annotations, <https://dl.acm.org/doi/abs/10.1145/3379336.3381457>, ACM, Cagliari, Italy, 2019
17. Sahan Bulathwela, Emine Yilmaz, John Shawe Taylor, Predicting Engagement in Video Lectures, https://educationaldatamining.org/files/conferences/EDM2020/papers/paper_62.pdf, EDM 2020, Virtual, 2019
18. Sahan Bulathwela, Davor Orlic, Colin de la Higuera, Emine Yilmaz, John Shawe Taylor, Report on the WSDM 2020 Workshop on State-based User Modelling (SUM'20), <http://sigir.org/wp-content/uploads/2020/06/p07.pdf>, 2019
19. Sahan Bulathwela, Davor Orlic, Accessibility recommendation system [O-113], <https://oer20.oerconf.org/sessions/o-113/>, OER 2020, London, UK, 2019

3.2 LIST OF PERFORMED/PLANNED DISSEMINATION AND COMMUNICATION (M1-M36)

B. Conference Presentations:

20. D. Orlic (K4A), M. Jermol (JSI), 2018. X5GON project overview (presentation 3x) on technology plan and policy issues, Open Education Consortium Global conference, Delft, Netherlands, April 2018
21. D. Orlic (K4A), 2017. Research Institute for Innovation & Technology in Education (UNIR iTED), discussion on Open Education in practice, X5GON project overview (presentation), UNIR iTED Congress 2017: eLearning and Open Education in practice, Madrid, Spain, November 2017
22. D. Orlic (K4A), 2018. Online Educa Berlin, X5GON project accepted in the format of a panel presentation, X5GON project on AI and OER building a Netflix for Open Education, Berlin, Germany, December 2018
23. D. Orlic (K4A), J. Shawe-Taylor (UCL), 2019. UNESCO Conference on Harnessing Artificial Intelligence to advance Knowledge Societies and Good Governance, An Open Discussion following the Internet Governance Forum (IGF) 2018, Mozilla Foundation. Contribution to Session 1: AI Advocacy, Session 4: Understanding Openness and inclusiveness in the age of advanced ICTs, X5GON technologies fit for Global South reuse, Artificial Intelligence and Education efforts, Paris, France, November 2019
24. D. Orlic (K4A), 2019. UNESCO First High-level Forum on AI in Africa - The Forum's objective is to enrich the global reflection on artificial intelligence by drawing up a complete inventory of the situation and towards an assessment of an African scale, by taking into account challenges, opportunities and issues specific to local contexts. Plenary session "Universal Access to Information and Knowledge, and Artificial intelligence in Africa", Contribution to Outcome Statement of the Forum on Artificial Intelligence in Africa, Benguéir (Kingdom of Morocco), December 2019
25. J. Shawe Taylor (UCL), D. Orlic (K4A) 2019. Presenting at the introductory panel for major flagship UNESCO conference "Principles for AI: Towards a Humanistic Approach", X5GON technologies extendable to fit UNESCO OER

- Recommendation and all UNESCO Member States (Q/A session), Paris, France, March 2019
26. J. Shawe Taylor (UCL), D. Orlic (K4A) 2019. UNESCO workshop Workshop on Artificial Intelligence in Knowledge Societies: A ROAM Approach, X5GON technologies extendable to all UNESCO Member States (Q/A session), Paris, France, March 2019
 27. A. Juan (UPV) 2019. SCIC-Universities conference, Interpretation - Preparing for Interpreting 3.0, X5GON project overview (presentation), April 2019
 28. D. Orlic (K4A), 2019. Slovenian Open Knowledge Day - X5GON was presented as one of the main platforms using Wikipedia as its base technology with the Wikifier at its core. The presentation followed Jan Gerlach, from the Wikimedia Foundation at the Slovenian Open Knowledge Day, X5GON project overview and relevance of creating the Wikifier in the core of the X5GON platform to Wikipedia (presentation), Ljubljana, Slovenija, May 2019
 29. D. Orlic (K4A), 2019. Slovenian Rectors' Conference - Transformation of the Educational Process in the age of Digitisation, Rectors conference discussing Open Education and X5GON technologies (Q/A session with moderator), Vipava, Slovenia, May 2019
 30. E. Novak (JSI), 2019. Invited talk at IJCAI workshop on AI and the United Nations SDGs X5GON project overview (presentation), Presentation on X5GON platform and fitting into SDG framework, Macao, China, August 2019
 31. S. Kreitmayer (UCL), 2019. Accepted workshop contribution paper, Paper: The challenges of Learning Machine Learning for Non-Technical Users or Novice Programmers Workshop: Human-Centered Study of Data Science Work Practices, Glasgow, UK, May 2019
 32. S. Kreitmayer (UCL). 2019. Poster presentation of research paper Design in the Wild: Interfacing the OER learning journey, 32nd International BCS Human Computer Interaction Conference (HCI), Belfast, UK, July 2019
 33. C. de la Higuera (NA), 2019. A talk on AI at a local engineer school, with X5-GON presented, L'intelligence artificielle ICAM, Nantes, January 2019
 34. C. de la Higuera (NA), 2019. A talk on social networks for the training of High school teachers, Les réseaux sociaux, Webinaires SNT, Nantes, France, March 2019
 35. C. de la Higuera (NA), 2019. A presentation during the X5GON event, Using MOOCs in India, X5-GON event, Osnabrück, Germany, March 2019
 36. C. de la Higuera (NA), 2019. I presented AI to an audience of Alumni from the Frenche Engineering schools. With X5-GON included, L'intelligence artificielle, IESF Pays de la Loire, Nantes, France, March 2019
 37. C. de la Higuera (NA), 2019. Presentation at UNESCO, L'intelligence artificielle, WSIS forum 2019, Geneva, Switzerland, April 2019
 38. C. de la Higuera (NA), 2019. A webinar toward regional audience to get them interested in working on X5-GON material, L'intelligence artificielle Webinaire AILE, Nantes, France, May 2019
 39. C. de la Higuera (NA), 2019. A citizen event about the impact of AI on education. I presented X5-GON, L'intelligence artificielle, Former à l'intelligence artificielle pour répondre aux défis d'aujourd'hui et de demain ! aura lieu, Nantes, France, Apri 2019
 40. C. de la Higuera (NA), 2019. We presented X5-GON at this event X5GON Journées IA, Rennes, France, June 2019
 41. C. de la Higuera (NA), 2019. An event organized by Dell in Nantes with an audience of Dell B2B clients, L'intelligence artificielle, Dell Technologies, Forum, Nantes, France, June 2019
 42. C. de la Higuera (NA), 2019. A presentation of X5-GON in the context of the doctoral school presentations, L'intelligence artificielle, Rencontres Doctorales, Nantes, France, June 2019
 43. C. de la Higuera (NA), 2019. This is a meeting of European experts for education. We gave a keynote on teaching AI and participated to the X5-GON

- workshop which was organized on the 28th, Towards teaching artificial intelligence, Teaching for AI, Ljubljana, Slovenia, June 2019
44. C. de la Higuera (NA), 2019. A UNESCO event on the impact of AI. We were invited to participate to a panel and give a talk, a presentation of the report on teaching AI, at a UNESCO meeting, Teaching for AI, Paris, France, July 2019
 45. J. Urbančič (JSI), 2019. Presentation of the X5GON project X5GON: Connecting OER Repositories, X5GON: Connecting OER Repositories, Anchorage, Alaska, August 2019

C. Organization of a Conference/Workshop:

46. D. Orlic (K4A), M. Jermol (JSI), 2018. Mobile Learning Week 2018 workshops, X5GON project overview (presentation), Implementing the Ljubljana OER Action Plan by Building Skills via OER based Artificial Intelligence technologies, Paris, France, March, 2018
47. D. Orlic (K4A), M. Jermol (JSI), 2018. Mobile Learning Week 2018 workshops, X5GON project overview (presentation), Strategy Labs - The role of UN agencies/UNESCO in Artificial Intelligence, Paris, France, March 2018
48. M. Jermol (JSI), 2018. The University of Nova Gorica and UNESCO Chair on Open Technologies for OER organized a 5-day course on Open Education Design, Vipava, Slovenia, July 2018
49. D. Orlic (K4A), M. Jermol (JSI), B. Čampelj (MIZS), 2018. Experts meeting for UNESCO Recommendation on Open Educational Resources (OER), leading the draft text formulation further to the adoption of Resolution 44 'Desirability of a standard-setting instrument on international collaboration in the field of Open Educational Resources (OER)' at the 39th Session of the UNESCO General Conference, Paris, France, March 2018
50. D. Orlic (K4A), M. Jermol (JSI), 2018. "Setting up the Category 2 Centre on Artificial Intelligence Under the Auspices of UNESCO", X5GON project overview (presentation), X5GON as first project in new Centre in Artificial Intelligence addressing SD4 4 - Education for All, Ljubljana, Slovenia, May 2018
51. J. Shawe-Taylor (UCL), D. Orlic (K4A), 2018. Workshop during 2nd project meeting, X5GON related topics and businesses, Cumberland Lodge, UK, September 2018
52. C. de la Higuera (NA) 2019. X5GON workshop before 3rd meeting - This international workshop is part of the 3rd X5GON meeting - an EU funded project on Media Convergence, under H2020 Leadership in enabling and industrial technologies, X5GON Project Showcase and presentations related to open education, OER repositories, language technologies, personalisation, policy actions and more, Nantes, France, October 2018
53. D. Orlic (K4A), M. Jermol (JSI), 2019. UNESCO Mobile Learning Week 2019 - Workshop on using AI and OER data – convergence among OER platforms offers unprecedented opportunities X5GON project overview for policymakers in UNESCO Member States (presentation), Paris, France, March 2019
54. R. Rolf (OUS), F. Ollermann (UOS), 2019. X5GON workshop before 4th meeting - This international workshop is part of the 4th X5GON meeting and will focus on sustainability solutions for OER technologies, X5GON Project Showcase and presentations related to open education, OER repositories, language technologies, personalisation, policy actions and more, Osnabrück, Germany, March 2019
55. D. (K4A), J. Shawe Taylor (UCL), 2019. Workshop within the AI4D initiative in sub-Saharan Africa - Toward a Network of Excellence in Artificial Intelligence for Development (AI4D) in sub-Saharan Africa, X5GON exploitation efforts in Sub-Saharan Africa, Nairobi, Kenya, April 2019
56. D. Orlic (K4A), B. Čampelj (MIZS), 2019. PLA, Peer Learning Activities, EAC - DG Education and Culture, ET2020 Working Group Digital Education:

- Learning, Teaching and Assessment X5GON project overview for policymakers in EU Member States (presentation), X5GON Co-design workshop, Ljubljana, Slovenia, June 2019
57. D. Orlic (K4A), M. Jermol (JSI), 2019. International Open Education Design Workshop - run by UNESCO Chair on Open Technologies for OER and Open Learning at the Jožef Stefan Institute (JSI). The Workshop programme is tailored to cover the topics relevant to Open Education, X5GON Handout and Testing Towards Assessing Quality of Educational Content at Scale, Vipava, Slovenia, July 2019
 58. D. Orlic (K4A), C. de la Higuera (NA), 2019. IJCAI workshop on AI and the United Nations SDGs - The Workshop is based on the proposition of X5GON being a technology fit for purpose to solve SD4 to Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, X5GON project overview (presentation), Macao, China, August 2019
 59. J. Shawe Taylor (UCL), 2019. G7 Hackathon - A Hackathon supporting open education for NGOs and low income communities with AI driven applications, Using techniques and technologies from X5GON, a Hackathon is to be run with UCL in the UK leading the design and management with three phases, from October to early December, Paris, France, December 2019
 60. C. de la Higuera (NA), 2019. A meeting for Human resources specialists about AI. We gave a talk and participated to a panel, L'intelligence artificielle: impact et risques. A local event organized by Mickael Page, Nantes, France, May 2019
 61. B. Čampelj (MIZS), 2019. Promotion of X5gon project activities on OER, AI and platform at the National School for Leadership in Education - workshop for future headmasters, X5gon engine; OER e-materials at EU, National School for Leadership in Education - workshop for future headmasters, Ljubljana, Slovenia, May 2019

D. Participation in activities organised jointly with other H2020 project(s):

62. D. Orlic (K4A), M. Jermol (JSI), 2017. X5GON project overview (Poster presentation) H2020 Media Projects' Workshop: Collaboration Towards the Future of Media, Brussels, Belgium, October 2017
63. D. Orlic (K4A), 2017. MicroHE project kick-off, X5GON project overview and extendibility to blockchain solutions (presentation), "MicroHE – Support Future Learning Excellence through Micro-Credentialing in Higher Education
64. Erasmus+, EACEA/41/2016 - Forward-Looking Cooperation Projects, Heilbronn, Germany, December 2017
65. D. Orlic (K4A), 2017. I3 Impact Innovation Invest is a 30 months CSA, X5GON project overview (presentation) and pitch to investors, I3 London 'Media Innovation & Investment' event, London, UK, October 2017

E. Participation in a Conference/Workshop/Event other than a Conference or Workshop:

66. D. Orlic (K4A), 2017. Communia international association on the digital public domain, X5GON project overview and issues with open licensing, Communia strategy meeting for a better copyright for education, Brussels, Belgium, November 2017
67. D. Orlic (K4A), 2018. X5GON project overview (presentation), Presentation on machine translation for open content and OER aggregation platform, Creative Commons Summit, Toronto, Canada, April 2018
68. D. Orlic (K4A), M. Jermol (JSI), 2018. Mobile Learning Week, UNESCO's flagship ICT in education event, X5GON project overview (presentation), Paris, France, March 2018
69. M. Jermol (JSI), 2018. Invited by Marietje Schaake, Member of the European Parliament (MEP) as speaker to a roundtable at the Future of Technology in

- Education at the European Parliament, X5GON project overview and issues with open licensing, Brussels, Belgium, March 2018
70. D. Orlic (K4A), 2018. Meeting at Idea London with John Spindler, Head of Capital Enterprise, X5GON project overview (presentation), London, UK, July 2018
 71. J. Shawe Taylor (UCL), Y. Rogers (UCL), D. Orlic (K4A), 2018. Meeting with company 2U, X5GON presentation, X5GON business and exploitation, London, UK, July 2018
 72. A. Juan (UPV), 2018. LISTEN Workshop / Summer School Multilingual videos for education, Multilingual videos for education, Bonn, Germany, July 2018
 73. G. G. Díaz-Munío (UPV), 2018. "EMNLP 2018, Third Conference on Machine Translation", MLLP-UPV German-English Machine Translation System for WMT18, Brussels, Belgium, October 2018
 74. D. Orlic (K4A), 2018. Attending the UNESCO Roundtable on Artificial Intelligence: Reflection on its complexity and impact on our society, X5GON project overview and extendibility to SDG4 Artificial Intelligence and Education efforts, Paris, France, September 2018
 75. B. Čampelj (MIZS), 2018. Promotion at Brussels meeting - indicators in digital education (one possibilities - indicator on OER and activities) - at the meeting and in breaks X5gon engine; OER e-materials at EU, Expert meeting - indicators in digital education, EC, Brussels, Belgium, September 2018
 76. B. Čampelj (MIZS), 2018. Promotion of X5gon at Brussels meeting on Erasmus + and Horizon 2020 meeting (good experience from running and previous projects) - at the meeting and in breaks X5gon engine; OER e-materials at EU, Expert meeting - EU projects (Erasmus +, Action 3 policy experimentation), EC, Brussels, Belgium, September 2018
 77. B. Čampelj (MIZS), 2018. Promotion of X5gon at NEI meeting of the project NA-MA POTI - at the meeting and in breaks; possibilities of involvement of external stakeholders (for example India), X5gon engine; OER e-materials at EU, project NA-MA POTI, meeting National Education Institute, Ljubljana, Slovenia, September 2018
 78. B. Čampelj (MIZS), 2018. Promotion of X5gon at SVRK meeting of the project Semena sprememb - possibilities to share OER e-materials of teachers in the project X5gon engine; OER e-materials at EU, Dissemination to particular expert SVRK, Ljubljana, Slovenia, September 2018
 79. B. Čampelj (MIZS), 2018. Promotion X5gon in Brussels meeting - (Digital Education: Learning, Teaching and Assessment) DELTA GROUP (OER and activities; and information for possible workshop in Slovenia at Peer learning in AI in education), X5gon engine; OER e-materials at EU, Expert meeting - Digital Education: Learning, Teaching and Assessment (E&T 2020), EC, Brussels, Belgium, September 2018
 80. B. Čampelj (MIZS), 2018. Promotion of X5gon in meeting at the conference on digital higher education in Portoroz, X5gon engine; OER e-materials at EU conference on digital higher education, Portoroz, Slovenia, September 2018
 81. B. Čampelj (MIZS), 2018. Promotion of X5gon on the Conference in Austria - under presidency (good experience from running and previous projects) - at the workshops/debates and in breaks X5gon engine; OER e-materials at EU conference on digital education under Presidency Austria, Eisenstadt, Austria, October 2018
 82. B. Čampelj (MIZS), 2018. Promotion of x5gon on the Conference in Brdo, Slovenia - at the workshops/debates and in breaks X5gon engine; OER e-materials at EU, Conference on innovation, Brdo, Slovenia, October 2018
 83. B. Čampelj (MIZS), 2018. Promotion of X5gon at the Conference with headmasters and experts of MUNERA projects at VET (at presentation and debates during break) X5gon engine; OER e-materials at EU, Conference on education - project MUNERA Ljubljana, Slovenia, October 2018

84. B. Čampelj (MIZS), 2018. Promotion of x5gon at the conference Digitalisation 4.0 (adult education institutions and educators) also in breaks (possibilities to use results of X5gon) X5gon engine; OER e-materials at EU, Conference on adult education, Ljubljana, Slovenia, November 2018
85. B. Čampelj (MIZS), 2018. Promotion of X5gon at the Annual Conference with headmasters of upper-secondary schools in Slovenia (Portoroz), at the workshops and breaks, X5gon engine; OER e-materials at EU, Annual Conference with headmasters of upper-secondary schools in Slovenia, Portoroz, Slovenia, November 2018
86. B. Čampelj (MIZS), 2018. Promotion of x5gon at the conference - results of 2nd survey ICT in education (including OER) - promotion in debates/breaks, X5gon engine; OER e-materials at EU, conference for policy makers - results of 2nd survey ICT in education, EC, Brussels, Belgium, November 2018
87. B. Čampelj (MIZS), 2018. Promotion of X5gon at the NA-MA POTI project meeting with teachers and headmasters, X5gon engine; OER e-materials at EU, NA-MA POTI project meeting with teachers and headmasters Ljubljana, Slovenia, November 2018
88. B. Čampelj (MIZS), 2018. Promotion of X5gon at the expert meeting in National Council of Republic Slovenia on digitalisation and platforms (in debates and breaks), X5gon engine; OER e-materials at EU, expert meeting in National Council of Republic Slovenia on digitalisation and platforms, Ljubljana, Slovenia, December 2018
89. M. Ifko-Pinosa (MIZS), D. Orlic (K4A), 2018. X5GON Presentation meeting with executives of educational institutions in Slovenia, X5GON project overview and the value of the X5GON for the educational system in the Republic of Slovenia, Exploitation meeting for SI HEIs joining X5GON Connect service, Ljubljana, Slovenia, September 2018
90. M. Ifko-Pinosa (MIZS), D. Orlic (K4A), E. Novak (JSI), 2018. X5GON Presentation meeting with executives of educational institutions in Slovenia, X5GON project overview and the value of the X5GON for the educational system in the Republic of Slovenia, Exploitation meeting for SI HEIs joining X5GON Connect service, Ljubljana, Slovenia, November 2018
91. M. Ifko-Pinosa (MIZS), D. Orlic (K4A), E. Novak (JSI), 2018. Meeting with top management of all Slovenian universities and national institutions for disabled communities, X5GON project overview and the value of the X5GON for the educational system in the Republic of Slovenia, Exploitation meeting for SI HEIs joining X5GON Connect service, Maribor, Slovenia, November 2018
92. M. Ifko-Pinosa (MIZS), D. Orlic (K4A), E. Novak (JSI), 2018. Meeting with top management of University of Maribor Library, X5GON project overview and the value of the X5GON for the educational system in the Republic of Slovenia, Exploitation meeting for joining X5GON Connect service Ljubljana, Slovenija, December 2018
93. M. Ifko-Pinosa (MIZS), D. Orlic (K4A), E. Novak (JSI), K. Perčič (PO) 2019. Meeting with Zavod za gluhe in naglušne (Institute for the Deaf and Hard of Hearing), X5GON project overview and the value of the X5GON for the deaf and hard of hearing community in the Republic of Slovenia, Exploitation meeting for disabilities piloting of recommendation and material search, Ljubljana, Slovenija, December 2018
94. M. Ifko-Pinosa (MIZS), K. Perčič (PO) 2019. Meeting with Center za izobraževanje, rehabilitacijo, inkluzijo in svetovanje za slepe in slabovidne Ljubljana (Center for Education, Rehabilitation, Inclusion and Counseling for the Blind and Visually Impaired Ljubljana), X5GON project overview and the value of the X5GON for the blind and visually impaired community in the Republic of Slovenia Exploitation meeting for disabilities piloting of recommendation and material search, Ljubljana, Slovenija, December 2018
95. B. Čampelj (MIZS), 2018. Promotion of X5gon at the policy meeting - panel discussion on ICT strategy in education in Ministry of Education Croatia at

- panel discussion and debates and breaks, X5gon engine; OER e-materials at EU, policy meeting - panel discussion on ICT strategy in education in Ministry of Education Croatia Zagreb, Croatia, December 2018
96. B. Čampelj (MIZS), 2018. Promotion of X5gon at the expert meeting of Internet Safety (Faculty of Social Sciences - coordinator of Safe.si project), X5gon engine; OER e-materials at EU, expert meeting of Internet Safety, Ljubljana, Slovenia, December 2018
 97. B. Čampelj (MIZS), 2018. Promotion of X5gon at the conference on Public Administration (Brdo) - presentation and debates in workshops and breaks; notes from Project Management Board, X5gon engine; OER e-materials at EU, conference on Public Administration, Brdo, Slovenia, December 2018
 98. B. Čampelj (MIZS), 2018. Promotion of X5gon at the conference Eminent (debates and breaks) X5gon engine; OER e-materials at EU, conference Eminent, Lisbon, Portugal, December 2018
 99. B. Čampelj (MIZS), 2018. Promotion of X5gon at the conference Microsoft on AI (debates in breaks) X5gon engine; OER e-materials at EU, conference Microsoft on AI, Ljubljana, Slovenia, December 2018
 100. D. Orlic (K4A), 2018. We have been given VIP tickets to attend the World Summit in AI for exploitation purposes, Amsterdam, Netherlands, October 2018
 101. K. Perčič (PO), M. Jermol (JSI), 2019. EU Media Convergence and Social Media Concertation meeting - We attended the Concertation meeting in Brussels, with the objective to bring together projects to discuss and share, to learn from each other and to find synergies and possibilities for future collaborations, X5GON project overview (presentation), Brussels, Belgium, February 2019
 102. M. Jermol (JSI), 2019. UNESCO OER Recommendation final meeting - The UNESCO OER Recommendation was approved by UNESCO member states on 28th May, by consensus. Its final step for approval will take place at the UNESCO General Assembly in November, 2019. X5GON is the technology to be offered to Member States to implement the policy, X5GON project overview for policymakers in UNESCO Member States (presentation, Paris, France, May 2019
 103. D. Orlic (K4A), M. Jermol (JSI), 2019. Mentoring Programme – Open Education for a better world - The mentoring programme 2019 supported 35 mentees ensuring they settle in quickly and are able to achieve their potential and is specifically designed for each of the problems they are trying to solve under the supervision of 41 mentors. X5GON Handout and Testing Towards Assessing Quality of Educational Content at Scale Ljubljana, Slovenia, August 2019
 104. B. Čampelj (MIZS), 2019. Promotion of X5gon project at the peer learning meeting in Luxemburg (DELTA group and other experts; (Digital Education: Learning, Teaching and Assessment), X5gon engine; OER e-materials at EU, peer learning meeting in Luxemburg (DELTA group and other experts), Luxemburg, January 2019
 105. B. Čampelj (MIZS), 2019. Promotion of X5gon project at Bett show - various stakeholders from Slovenia and other countries, X5gon engine; OER e-materials at EU, Bett show, London, UK, January 2019
 106. B. Čampelj (MIZS), 2018. Promotion of X5gon project activities on OER - Dare Stojan, member of Social-economic committee X5gon engine; OER e-materials at EU, meeting with expert Ljubljana, Slovenia, February 2019
 107. B. Čampelj (MIZS), 2019. Promotion of X5gon project activities on OER, AI and platform at DELTA meeting in Brussels (E&T 2020; discussion in breaks); possible peer learning in Slovenia, X5gon engine; OER e-materials at EU, DELTA meeting in Brussels (E&T 2020), EC, Brussels, Belgium, February 2019

108. B. Čampelj (MIZS), 2019. Promotion of X5gon project activities on OER, AI and platform Scientix conference in Beograd (discussions and possible activities in Balkan region), X5gon engine; OER e-materials at EU, Scientix conference, Beograd, Serbia, February 2019
109. B. Čampelj (MIZS), 2019. Promotion of X5gon project activities on OER, AI and platform on the Management board at ARNES institution (I am member of Board), X5gon engine; OER e-materials at EU, Management board at ARNES institution, Ljubljana, Slovenia, February 2019
110. B. Čampelj (MIZS), 2019. Promotion of X5gon project activities on OER and platform in National Education Institute (Andreja Bačnik), X5gon engine; OER e-materials at EU, meeting with expert, Ljubljana, Slovenia, March 2019
111. B. Čampelj (MIZS), 2019. Promotion of X5gon project activities on OER, AI and platform at the meeting of Listiac project (new Erasmus + project), X5gon engine; OER e-materials at EU, meeting of Listiac project, Helsinki, Finland, March 2019
112. B. Čampelj (MIZS), 2019. Promotion of X5gon project activities on OER, AI and platform at the Ministry of Education Singapur, National Education Institute, University of Singapur, X5gon engine; OER e-materials at EU, Meeting at Ministry of Education Singapur, National Education Institute, University of Singapore, Singapore, March 2019
113. B. Čampelj (MIZS), 2019. Promotion of X5gon project among headmasters and teachers from Slovenia at the excursion in Singapore, X5gon engine; OER e-materials at EU, Policy discussion with national experts in excursion in Singapore, Singapore, March 2019
114. B. Čampelj (MIZS), 2019. Promotion of X5gon project activities on OER, AI and platform in the conference for headmasters from Singapore and other experts (in breaks), X5gon engine; OER e-materials at EU conference for headmasters from Singapore and other experts, Singapore, March 2019
115. B. Čampelj (MIZS), 2019. Promotion of X5gon project activities workshops in deliZnami (share with us) for co-workers X5gon engine; OER e-materials at EU, workshops in deliZnami, Ljubljana, Slovenia, April 2019
116. B. Čampelj (MIZS), 2019. Promotion of X5gon project activities on OER, AI and platform in the conference SELFIE in Madrid (in breaks; various experts from ministries of education, national education institutions; teachers and researchers; EUN Schoolnet), X5gon engine; OER e-materials at EU conference SELFIE Madrid, Spain Thursday, April 4, 2019
117. B. Čampelj (MIZS), 2019. Promotion of X5gon project activities on OER, AI and platform at the Microsoft workshop for policy makers at the Ministry, National education institutions, headmasters, X5gon engine; OER e-materials at EU, Microsoft workshop for policy makers at the Ministry, National education institutions, headmasters Ljubljana, Slovenia, April 2019
118. B. Čampelj (MIZS), 2019. Promotion of X5gon project activities on OER, AI and platform at Microsoft NT conference (EDU track) with Microsoft experts and headmasters and teachers in breaks; and meetings with Microsoft, X5gon engine; OER e-materials at EU, Microsoft NT conference (EDU track), Portoroz, Slovenia, May 2019
119. B. Čampelj (MIZS), 2019 promotion of X5gon project in breaks at DELTA (Digital Education: Learning, Teaching and Assessment) PLA meeting (experts on ICT in education) X5gon engine; OER e-materials at EU, DELTA (Digital Education: Learning, Teaching and Assessment) PLA meeting (experts on ICT in education), Ljubljana, Slovenia, June 2019
120. K. Perčič (PO), 2019. Presenting the x5gon project and openness for cooperation with startup Equaleyes solutions, Teachers dashboard workshop, what they need, Meeting for cooperation, Maribor, Slovenia, April 2019

121. K. Perčič (PO), 2019. Presenting x5gon and key functionalities X5GON project overview (presentation), X5GON Project Showcase Ljubljana, Slovenia, June 2019
122. K. Perčič (PO), 2019. Presenting the x5gon project on startup event in Ljubljana - open space on PS Tržaška, X5GON project overview, (presentation) Meeting for establishing of research cloud Maribor, Slovenia, April 2019
123. K. Perčič (PO), 2019. Presenting the x5gon project to Sonja Rnjak CEEMA (Central, Eastern Europe, Middle East and Africa) and Denis Stanarevič at Hewlett Packard Enterprise, X5GON project overview (presentation) Meeting for cooperation, Maribor, Slovenia, May 2019
124. K. Perčič (PO), 2019. Presenting x5gon to B2 - Slovenian leading e-learning company - intent for cooperation, X5GON project overview (presentation), "Presentation Introduction to Open Education for Business and Industry" Vipava, Slovenia, June 2019
125. K. Perčič (PO), 2019. Conference Open education for better world, Presenting the OE on industry track Introduction to OE for Business and Industry, X5GON adoption and potential for industry, Vipava, Slovenia, April 2019
126. M. Ifko-Pinosa (MIZS), D. Orlic (K4A), 2019. Meeting with Zavod za zaposlovanje RS (Employment Service of Slovenia) X5GON project overview and the value of the X5GON for non-formal education, Exploitation meeting for joining X5GON platform, Ljubljana, Slovenia, April 2019
127. D. Orlic (K4A), 2019. Presentation and organisation of Deep Learning Indaba Involvement in the organising committee and presentation of X5GON feed, API and datasets, Presentation of potential pan-African cooperation with X5GON platform, Nairobi, Kenya, August 2019
128. Erik Novak (JSI), Presentation of the X5GON project to OCAD University, Toronto, X5GON project overview (presentation), December 2019
129. Sahan Bulathwela (UCL), Design Hackathon University College London, X5GON API Tutorial AI for social good design hackathon, London, UK, Sep-19
130. Sahan Bulathwela (UCL), Hackathon University College London, X5GON API Tutorial, Hackathon - building solutions on top of the x5gon system London, UK, November, 2019
131. Rüdiger Rolf (UOS), First Presentation of local Hackathon at UOS, Hackathon promotion for local students, Kick Off-Meeting, Osnabrück, Germany, May 2019
132. Sahan Bulathwela (UCL), Hackathon Jan - Innovation IT sprint of PS X5GON API Tutorial Hackathon - building an solutions on top of the x5gon system, Maribor, Slovenija, Jan 2020
133. Erik Novak (JSI), Presentation of the X5GON project to Creative Commons, X5GON project overview (presentation), January 2020
134. Erik Novak (JSI), Presentation of the X5GON project to OER Africa, X5GON project overview (presentation), January 2020
135. Erik Novak (JSI), Presentation of the X5GON project to E-Campus Ontario, Canada, X5GON project overview, January 2020
136. Colin de la Higuera (NA), 21 janvier Digital Change <https://www.digital-change.fr/contenu-metier/cobots-robots-et-ia-reste-il-encore-de-la-place-pour-l-homme-dans-l-entreprise>, Panel. Colin de la Higuera on the role of AI, Panel at "Digital Change" forum, Nantes, France, January 2020
137. Rüdiger Rolf (UOS), Final presentations for Hackathon contestants from Osnabrück, Hackathon, Final Presentation and selection of winners, Osnabrück, Germany, January 2020

138. Mojca Ifko-Pinosa (MIZS), Hackathon Maribor, X5GON project overview and opportunities for further development Presentation for participants, Maribor, Slovenia, January 2020
139. Mojca Ifko-Pinosa (MIZS), Meeting with Deputy Mayor of Maribor mrs. Helena Lukaček Kolundžija X5GON project overview and the value of the X5GON for the Republic of Slovenia, Presentation meeting for policy makers in Slovenia, Ljubljana, Slovenia, January 2020
140. Erik Novak (JSI), Presentation of the X5GON project to COER, India, X5GON project overview (presentation), February 2020
141. Colin de la Higuera (NA), Hackathon Hackathon for x5gon solutions, Hackathon - building solutions on top of the x5gon system, Paris, France, February 2020
142. Walid Benromdhane (NA), Hackathon, Hackathon for x5gon solutions, Hackathon - building solutions on top of the x5gon system, Paris, France, February 2020
143. Victor Connes (NA), Hackathon, Hackathon for x5gon solutions, Hackathon - building solutions on top of the x5gon system, Paris, France, February 2020
144. Mojca Ifko-Pinosa (MIZS), Meeting with minister of environment and spatial planning Simon Zajec X5GON project overview and the value of the X5GON for the Republic of Slovenia, Presentation meeting for policy makers in Slovenia, Ljubljana, Slovenia, February 2020
145. Mojca Ifko-Pinosa (MIZS), Meeting with ministre of economic development and technology X5GON project overview and the value of the X5GON for the Republic of Slovenia, Presentation meeting for policy makers in Slovenia, Ljubljana, Slovenia, February 2020
146. Sahan Bulathwela (UCL), FAIR hackathon Final, Paris, X5GON API Tutorial, Hackathon - building solutions on top of the x5gon system, Paris, France, February, 2020
147. Emine Yilmaz (UCL), Incorporating user state in task based information retrieval and recommendation of educational resources, Workshop on State-based User Modelling at WSDM 2020 Presented the TrueLearn algorithm, Houston, TX, USA, February 2020
148. Maria Perez-Ortiz (UCL), An AI-powered learning algorithm providing inclusive, multi-modal, cross-lingual and quality lifelong learning opportunities for all Unesco Mobile Learning Week, Presented the TrueLearn algorithm, Virtual, March 2020
149. Mojca Ifko-Pinosa (MIZS), Meeting with the Chairman of the Committee on Education, Science, Sport and Youth at the National Assembly of the Republic of Slovenia, X5GON project overview and the value of the X5GON for the educational system in the Republic of Slovenia, Presentation meeting for policy makers in Slovenia, Ljubljana, Slovenia, May 2019
150. Maria Perez-Ortiz (UCL), An AI-powered learning algorithm providing inclusive, multi-modal, cross-lingual and quality lifelong learning opportunities for all, Nesta - The innovation Foundation, Presented the TrueLearn algorithm, Virtual, March 2020
151. Sahan Bulathwela (UCL), presentation organised by Sustainable Educational Foundation, AI for social good, Virtual, June 2020`
152. Mojca Ifko-Pinosa (MIZS), Meeting with director of Vocational College for Hospitality, Wellness and Tourism Bled, mag. Peter Mihelčič, X5GON project overview and the value of the X5GON for the educational system in the Republic of Slovenia with special regard of the value for schools, Exploitation meeting for joining X5GON platform, Ljubljana, Slovenia, June 2020
153. Sahan Bulathwela (UCL), presentation at journal club meeting of Web Intelligence Journal Reading Group, University College London, TrueLearn: A

- Family of Bayesian Algorithms to Match Lifelong Learners to Open Educational Resources, Virtual, July 2020`
154. Sahan Bulathwela (UCL), presentation at Explainable AI special Interest group, University College London, EXPLAINABLE X5GON: X5GON project and Explainable Artificial Intelligence, Virtual, July 2020`
 155. Sahan Bulathwela (UCL), X5Learn Platform Demonstration Open education for a better world Eduscope, Demonstration of the X5Learn platform, Virtual, July 2020`
 156. Colin de la Higuera (NA), Talk at AIED 2020 Teaching AI, Talk at workshop, Vienna, Austria (Online), July 2020
 157. Erik Novak (JSI), Presentation of the X5GON project to Open Education Consortium, Brazil X5GON project overview (presentation), July 2020
 158. Erik Novak (JSI), Presentation of the X5GON project to FIOCRUZ, Brazil, X5GON project overview (presentation), Online, August 2020
 159. Colin de la Higuera (NA), 21 Septembre: Conférence IA et les Objectifs de Développement Durable, <https://chaireunescorel.is2n.fr/2020/08/27/conference-en-ligne-ia-et-objectifs-de-developpement-durable/>, Seminar on AI and the SDGs, Nantes, France, September 2020
 160. Erik Novak (JSI), Presentation of the X5GON project, X5GON project overview (presentation), X5GON: using AI for connecting OER sites for the collective benefit of everyone, everywhere, Creative Commons Summit 2020 (online), October 2020
 161. Colin de la Higuera (NA), AUPTIC, <https://chaireunescorel.is2n.fr/2020/11/05/lia-et-les-rel-a-auptic-2020/>, https://www.youtube.com/watch?v=AbTn7pq_bKQ&feature=youtu.be, AUPTIC (Association pour l'Utilisation Pédagogique des Technologies de l'Information et de la Communication), Invited talk, Louvain, Belgium, November 2020
 162. Colin de la Higuera (NA), Talk at OEGlobal 2020, <https://chaireunescorel.is2n.fr/2020/08/23/x5-moodle/>, X5-MOODLE, Talk at the OeGlobal conference, Taipei, Taiwan (online), November 2020
 163. Erik Novak (JSI), Presentation of the X5GON project to W.E.B. Du Bois Library, Massachusetts, USA, X5GON project overview (presentation), December 2020

F. Publications in Social Media and Websites:

164. K4A website for X5GON, <http://www.k4all.org/project/x5gon/>
165. Tweets at https://twitter.com/K4A_Foundation
166. J. Shawe Taylor (UCL), 2019. Interview at Workshop "Toward a Network of Excellence in Artificial Intelligence for Development (AI4D) in sub-Saharan Africa", Showcase X5GON as feasible technology for online education in Global South, Nairobi, Kenya, April 2019
167. J. Shawe Taylor (UCL), 2019. Interview at HumaneAI kick-off, Showcase X5GON as feasible AI technology for online education, Berlin, Germany, April 2019
168. K. Perčič (PO), I. Renčelj (PO), M. Jermol (JSI) 2019. Pošta Slovenije, in cooperation with the Jožef Stefan Institute, both partners in X5GON handed over part of new office spaces in Ljubljana to four high-tech startups. X5GON was showcased as a unique project connecting the two partners. X5GON project overview (presentation), Ljubljana, Slovenija , April 2019

G. Sections in Newsletters:

169. Y. Rogers (UCL), 2018. UCL Interaction Design Center 2018 Newsletter, News item "X5GON – Transforming online learning into a whole new experience", London, UK, February 2018

H. Non-scientific and non-peer reviewed publications (popularised publications):

170. D. Orlic (K4A), M. Jermol (JSI), B. Čampelj (MIZS), 2017. X5GON described as case study in "Policy implementation and impact to date" for Slovenia, and Policy Approaches to Open Education Case Studies from 28 EU Member States (OpenEdu Policies), Publications Office of the European Union
171. D. Orlic (K4A), 2018. UNESCO-COL Advisory Group, Guidelines on the Development of OER Policies, X5GON project overview (presentation), First draft of the Guidelines on the Development of Open Educational Resources Policies, Online, August 2018
172. J. Shawe-Taylor (UCL), D. Orlic (K4A), 2018. "Setting up the application for UNECO Chair in Artificial Intelligence Under the Auspices of UNESCO", X5GON part of application submission, X5GON as first project in portfolio of new UNESCO Chair in Artificial Intelligence addressing SD4 4 - Education for All, London, UK, April 30, 2018
173. S. Bulathwela (UCL), 2018. Microsoft Research AI Summer School, X5GON Poster Towards Assessing Quality of Educational Content at Scale, Cambridge, UK, July 2018
174. S. Bulathwela (UCL), 2018. X5GON Poster, Handout, Towards Assessing Quality of Educational Content at Scale, Vipava, Slovenia, July 2018
175. D. Orlic (K4A), M. Jermol (JSI), 2019. UNESCO publication "Artificial Intelligence and frontier technologies for OER" - X5GON is contributing to the upcoming report on the use of AI and frontier technologies for OER, together with UNESCO's Communication and Information Sector. The report is an initial scoping study trying to understand how similar technologies to X5GON can be suited to further the development and expansion of OER in achieving United Nations SDG 4, X5GON breakdown of technologies overview in book chapter, First draft of the report, Paris, France, December 2019
176. C. de la Higuera (NA), 2019. UNESCO publication on teaching AI X5GON breakdown of technologies overview in book chapter, First draft of the report, Nantes, France, December 2019
177. D.Orlic (K4A), P. Bevek (MIZS), 2020. Umetna inteligenca za učinkovitejši dostop in uporabo odprtih izobraževalnih virov, December 2020
178. D.Orlic (K4A), P. Bevek (MIZS), 2020. Umetna inteligenca za učinkovitejši dostop in uporabo odprtih izobraževalnih virov, Casopis Delo, December 2020

3.3 LIST OF ACTIONS OF SPECIFIC IMPORTANCE (M12-M36)

In this section we would like to present in more details important dissemination actions and events within the X5GON dissemination strategy. These are a set of major collaborative actions of partners in scientific, policy, technical and research results. More specifically, we highlight a few activities from this period (see Section 3.3 to 3.6):

European policymaking level:

- **Peer Learning Activity (PLA) on artificial intelligence (AI) in education in June 2019 in Ljubljana, Slovenia**, organized by MIZS with an additional X5GON workshop for policymakers.

International policymaking level:

- **UNESCO Recommendation on Open Educational Resources published in November 2019 in Paris, France;** UNESCO Member States, at the CI Sector Commission of the General Conference, recommended the adoption of the UNESCO OER Recommendation at the Plenary Session of the 40th General Conference.
- **Ljubljana OER Congress and Action Plan 2017, September 2017:** the text of the UNESCO OER Recommendation builds on the outcomes of the Ljubljana OER Action Plan 2017 and supports UNESCO's efforts for the achievement of the UN 2030 Development Agenda.
- **Participation at the AI for Education Congress 2019 in Beijing, China;** one keynote overview presentation was given by the Coordinator.
- **Participation at the International Forum on Artificial Intelligence and the Futures of Education 2020 in Beijing, China;** one keynote overview presentation was given by the Coordinator.

European education stakeholders and innovation communities of practice:

- **Hackathon Series in London (UK), Maribor (SI), Osnabrück (GE), Nantes (FR) and finals in Paris during 2019/2020;** as a platform for engagement and engaging new communities and younger audiences at our partners' sites.
- **Dynamic Coalition of Governments, March 2020** to expand and consolidate commitments to actions, strategies and legislation in OER, with a "call on all educational stakeholders to implement the recommendations of the Ljubljana OER Action Plan 2017."
- **NGO Network to Support Implementation of the UNESCO OER Recommendation, March 2020;** a coalition of organizations active in advancing open education globally has joined forces to support the OER Recommendation implementation, funding members are K4A and JSI

Setup of completely new legal entity at JSI:

- **IRCAI:** At the 40th session of the General Conference, UNESCO Member States discussed this disruptive potential of AI, including in the fields of education, sciences, culture, communication. Underlining the importance of research to address the challenges of sustainable development, UNESCO's Member States approved the establishment of the International Research Centre on Artificial Intelligence (IRCAI), as a Category 2 centre under the auspices of UNESCO at the Jožef Stefan Institute (JSI), Ljubljana, Slovenia and congratulated the Republic of Slovenia for its forward-looking initiative.

3.4 PUBLIC EXPLOITATION VIA COMMUNITIES OF PRACTICE

The reviewers recommended that X5GON would benefit from a much greater engagement of communities of early adopters and the addition of a feedback loop from adopters incorporated into the project architecture. This included engaging startups and innovation communities outside of the project consortium, minimizing the existing gender inequalities in the project and maximizing the representation of women in the different project activities.

To this purpose we launched a hackathon comprised of three categories that seek to prototype knowledge exchanges that build capability across administrative, health and engineering skills, with application to NGOs and their staff as an example of its use. The solutions accounted for multilingual and literacy needs alongside various types of educational bias.

This hackathon was supported by the UK Science & Innovation Network at the British Embassy in Paris, the United Nations ANCSSC, and all X5GON partners and

allowed students at the four X5GON universities (and beyond) to take part in an early requirements capture process, leading to design and build stage to develop a working prototype that supports Open Education with AI. There were 3 themes for students to choose from:

1. **NGO Knowledge exchange:** How can we build capability through the exchange of knowledge between established and less accomplished organisations and their staff?
2. **Health knowledge exchange:** How can we build capability where there is poor access to healthcare training and education?
3. **Engineering knowledge exchange:** How we can we build capability through engineering education for all, including access to international conference coverage?

There were 4 hackathon events in this series. For the first event, first year (new) students took part in an *Ideation session*, on September 24th 2019 to come up with requirements and early sketch designs. The second event, *Design Prevision*, on October 16th 2019, was undertaken by second year CS student teams of 3s where they took part in design and HTML walk-through building a mash up or mock up of the projects features. There were special focus lab sessions at UCL on October 28th, 29th and 30th where invited guest speakers and industry mentors will be available to support the teams. They will submit by November 10th on Moodle. The third event, *Build and Test Hackathon*, took place over 48 hours on Monday 25th and Tuesday 26th November 2019 with several leading companies joining to support the mentoring of the teams with the actual build of their solutions. The students then had until January 10th 2020 to submit their technical build demos with a supporting video and GitHub repository. The top 3 teams from each country were then nominated by a University and British Embassy panel and the selected 9 students from each country had a final 2-day hack in Paris in February 2020. For this final fourth event, we decided that any partner can submit up to 3 teams to the final event at the British Embassy in Paris in February 2020. The final teams took part in a final Hackathon in Paris where all of the European teams competed in a new one-day *Open Education and AI challenge* that was presented back to the judging panel on Day 2. The judging panel announced the overall winning team in Paris.

3.5 POLICYMAKING ACTIVITIES

Three X5GON partners currently hold the title of UNESCO Chairs, namely UNESCO Chair on Open Technologies for OER and Open Learning with chair holder Mitja Jermol (JSI, WP4 leader), UNESCO Chair in teacher training technologies with OER with chair holder Colin de la Higuera (NA, WP5 leader) and the UNESCO Chair in Artificial Intelligence CL with chair holder and X5ON coordinator John Shawe-Taylor (UCL, WP1 and WP9 leader). All three are as well K4A trustees.

The Chairs with their involvement in UNESCO official drafting committees, expert groups and leadership of Government of Slovenia, again via the X5GON partners, actively contributed in an important step towards quality education and access to information for all, as UNESCO's General Conference adopted the Recommendation on Open Educational Resources (OER). UNESCO is the only UN agency with a dedicated OER programme. The term "Open Education Resource" was first coined in 2002 at a forum organised by UNESCO on Open Courseware in Higher Education.

This new Recommendation will support the development and sharing of openly licensed learning and teaching materials, benefitting students, teachers and researchers worldwide. The UNESCO Recommendation will support the creation, use and adaptation of inclusive and quality OER, and facilitate international cooperation in

this field. Its objectives also include the development of supportive policies and the creation of sustainability models for OER.

4. PERFORMED ONLINE-WORLD COMMUNITY ENGAGEMENT

4.1 X5LEARN

As X5GON is addressing online communities, for this purpose we have built a set of applications to interface those communities (see D8.4). However, we think that the standalone X5Learn is the main learner-facing web application of X5GON. It has been taken forward as a micro project in the HumaneAI Network of Excellence on Artificial Intelligence (ICT 48) to extend its existing prototype of the online learning platform X5LEARN developed by K4A and UCL and JSI and its new IRCAI centre under the auspices of UNESCO.

It is a standalone, learner-facing web application specifically designed to give access through an innovative interface to a portfolio of openly licensed educational resources (OER) in video and textual format. Designed for lifelong learners looking for specific content wanting to expand on their knowledge, our aim is to extend it to AI related topics. The updated application will be released via IRCAI a newly designated AI center and integrated with AI4EU with heavy HumaneAI branding. The main reason to push this product with IRCAI is that UNESCO is positioning itself as the main UN agency to promote a humanist Artificial Intelligence, a major international policy on the Ethics of AI and champion OER, which is in line with both X5GON and HumaneAI.

4.2 WEBSITE AND PLATFORM

The figure below presents an overview of the X5GON website users across the period Jan 2018 until December 2020 with a total of 22,230 views. Following the overview of the activities realized during Year 1 to 3 we could use the following figure towards measuring impact.



Figure 1: Number of users per month

By mapping and connecting data on the real-world and offline activities we see that these make online impact on the website, as well as transferring a lot of attention to the platform website. For example, we still observe that the months that coincide with the publication of project updates at the different participation levels of partners at events such as conferences and workshops, present peaks in the overall traffic. We reaffirm that our assumptions about the platform site proved to be correct, as the official website became the entry point to the first prototype and platform

demonstrator of the platform with content from the three case studies. Therefore, the decision to create a separate identity for the platform proves correct.

5 COMMUNICATION PACK FOR THE PROJECT LEGACY

We decided to limit ourselves to a set of basic and highly effective measures to provide longevity, they are as follows:

- **Final X5GON leaflet and poster:** The project leaflets are still being designed as an interactive graphic interface (as well as printed leaflet) since pivoting was needed as the new developments around the COVID-19 pandemic are unfolding. Emphasis was placed on establishing a leaflet that will act as an advertising tool for the X5GON platform. The sole purpose of this is to attract more OER sites to join us after projects end and the second and third wave of the pandemic.
- **X5GON Wikipedia article:** An X5GON related Wikipedia article was developed in English (<https://en.wikipedia.org/wiki/X5GON>), providing general information about the project and the X5GON services and the research and logic behind it. At the time of writing this report, the updated entry is being reviewed by Wikipedia editors.
- **X5GON public website for project legacy:** The X5GON public website (<https://www.x5gon.org/>) was established during the first week of the project, as one of the primary tools for communicating the project's concept, news and achievements. As the project is heading towards its end, the public website is gradually transferred to a different website, allowing developers and other communities of practice to join our network (<https://platform.x5gon.org/>). Before the two years contractual expiry of the hosting, the website will be pointed to the platform website which is intended to continue acting as a 24/7 beacon of the project's outcomes under the management of IRCAI.

6 CONCLUSION

The current report provided an overview of Y1-Y3 activities (M12-M36) delivered within the framework of WP 7, focused on dissemination activities of the project. This report also serves as a method to evaluate the activities realized from Y1-Y3.

Through the reporting of these activities, we can conclude that the dissemination and communication actions taken during this period were in line to the objectives, needs and progress of the project. These were based on the same directions as did the activities realized during the first year, with regards to the types of actions which were pursued and the target audiences reached.

Within the final part of the project in Y3, we are reporting mainly on outreach activities as stated and planned in D7.3 focusing on the promotion of the X5GON platform towards end-users, industry and innovation communities. The dissemination strategy supported the exploitation efforts and helped define pivotal opportunities with WP8 exploitation.

Worth mentioning is the extreme collegiality, friendliness, harmony and alignment of all project partners in the project, therefore we share a few lessons learned in dissemination, mainly designed to report our "outside the box" thinking:

- **Some successes as well as failures are hard to communicate:** Not all can be reported as there are too many intricacies, especially in the wake of the Covid-19 pandemic when all project personnel had to work online and pivoting

of reporting results was necessary into a really focused stream in a sudden flood of communications. There have been instances, events, and conversations about the project that can not be fairly reported and they would seem too vague but still in the long run really effective in reaching milestones;

- **Act as if it's not a project but a company you're running:** Internalising the potential of the project is essential for the dissemination results. The project website is one of the main communication tools, however as the project focused on showing technologies and gained complexity it was the right choice to move and migrate all the activities to the platform website in order to be more in touch with the zeitgeist of the project;
- **Only combined the assets have effect:** Pushing for and creating a distributed portfolio of research and development results, even beyond the workplan, and include researchers into public debate and map it to policy actions makes for a phenomenally strong dissemination impact;
- **Making an impression and sharing ideas:** Presentations in conferences, workshops appear to receive the highest impact and user engagements, if these are backed by usability checked prototypes on the platform website, the impact is much stronger. Communicating with all target groups, validating your assumptions and giving candid and honest feedback to partners is of essential importance.

7 APPENDIX

A1: UNESCO RECOMMENDATION ON OPEN EDUCATIONAL RESOURCES (OER)

PREAMBLE

The General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO), meeting in Paris from 12 to 27 November 2019, at its 40th session,

Recalling that the Preamble of UNESCO's Constitution affirms, "that the wide diffusion of culture, and the education of humanity for justice and liberty and peace are indispensable to the dignity of man and constitute a sacred duty which all the nations must fulfil in a spirit of mutual assistance and concern",

Recognizing the important role of UNESCO in the field of information and communications technology (ICT) and in the implementation of the relevant decisions in this area adopted by the General Conference of that Organization,
Also recalling Article I of UNESCO's Constitution, which assigns to UNESCO among other purposes that of recommending "such international agreements as may be necessary to promote the free flow of ideas by word and image",

Affirming the principles embodied in the Universal Declaration of Human Rights, which states that all people have rights, duties and fundamental freedoms that include the right to seek, receive and impart information and ideas through any media and regardless of frontiers (Article 19), as well as the right to education (Article 26), and the right freely to participate in the cultural life of the community, to enjoy the arts, and to share in scientific advancement and its benefits; and the right to the protection of the moral and material interests resulting from any scientific, literary, or artistic production of which one is the author (Article 27),

Also affirming the 2007 United Nations Declaration on the Rights of Indigenous

Peoples, which recognizes the rights of indigenous peoples in formulating national legislation and implementing national policy,

Noting the 2006 Convention on the Rights of Persons with Disabilities (Article 24), which recognizes the rights of persons with disabilities to education, and the principles contained in the 1960 Convention against Discrimination in Education,

Referring to the recommendation adopted at the 32nd session of the General Conference of UNESCO in 2003 with regard to the promotion of multilingualism and universal access to information in cyberspace,

Also referring to the 1997 UNESCO Recommendation concerning the Status of Higher-Education Teaching Personnel as well as the 1966 ILO/UNESCO Recommendation concerning the Status of Teachers, which stresses that as part of academic and professional freedom teachers “should be given the essential role in the choice and the adaptation of teaching material, the selection of textbooks and the application of teaching methods”,

Reaffirming the importance of the United Nations 2030 Agenda for Sustainable Development, which underlines that the “spread of information and communications technology and global interconnectedness has great potential to accelerate human progress, to bridge the digital divide and to develop knowledge societies...”,

Recognizing the leading role of UNESCO in the field of education and in the achievement of Sustainable Development Goal 4 (SDG 4), which calls for the international community to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all,

Further referring to the Education 2030 Framework for Action that lists a set of strategic approaches for the implementation of SDG 4, and which underlines that increasing access must be accompanied by measures that improve the quality and relevance of education and learning, and in particular that “education institutions and programmes should be adequately and equitably resourced with safe, environment-friendly and easily accessible facilities; sufficient numbers of teachers and educators of quality using learner-centred, active and collaborative pedagogical approaches; and books, other learning materials, open educational resources and technology that are non-discriminatory, learning conducive, learner friendly, context specific, cost effective and available to all learners – children, youth and adults”,

Acknowledging the Declaration of Principles of the 2003 World Summit on the Information Society, committing “to build a people-centred, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge”,

Also recognizing that the development of information and communications technology (ICT), including artificial intelligence and others, provides opportunities to improve the free flow of ideas by word, sound and image but also presents challenges for ensuring the participation of all in Knowledge Societies,

Further recognizing that quality basic education as well as media and information literacy are prerequisites to access and benefit from information and communications technology (ICT), including artificial intelligence and others,

Recognizing that, in building inclusive knowledge societies, Open Educational Resources (OER) can support quality education that is equitable, inclusive, open and participatory as well as enhance academic freedom and professional autonomy of teachers by widening the scope of materials available for teaching and learning,

Considering the International Covenant on Economic, Social and Cultural Rights (Article 13.1), the 2007 Cape Town Open Education Declaration, the 2009 Dakar Declaration on Open Educational Resources, the 2012 Paris Open Educational

Resources Declaration, the United Nations Millennium Declaration and the 2000 Dakar Framework for Action, which all recognize “the right of everyone to education”,

Building on the Ljubljana OER Action Plan 2017 to mainstream OER to help all Member States to create inclusive knowledge societies and achieve the 2030 Agenda for Sustainable Development, namely SDG 4 (Quality education), SDG 5 (Gender equality), SDG 9 (Industry, innovation and infrastructure), SDG 10 (Reduced inequalities within and across countries), SDG 16 (Peace, justice and strong institutions) and SDG 17 (Partnerships for the goals), thereto:

1. Adopts the present Recommendation on Open Educational Resources (OER), on this twenty-fifth day of November 2019;
2. Recommends that Member States apply the provisions of this Recommendation by taking appropriate steps, including whatever legislative or other measures may be required, in conformity with the constitutional practice and governing structures of each State, to give effect within their jurisdictions to the principles of the Recommendation;
3. Also recommends that Member States bring the Recommendation to the attention of the authorities and bodies responsible for learning, education and research, and consult relevant stakeholders concerned with learning and education;
4. Further recommends that Member States report to it, at such dates and in such manner as shall be determined, on the action taken in pursuance of this Recommendation.

I. DEFINITION AND SCOPE

1. Open Educational Resources (OER) are learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others.
2. Open license refers to a license that respects the intellectual property rights of the copyright owner and provides permissions granting the public the rights to access, re-use, re-purpose, adapt and redistribute educational materials.
3. Information and communications technology (ICT) provide great potential for effective, equitable and inclusive access to OER and their use, adaptation and redistribution. They can open possibilities for OER to be accessible anytime and anywhere for everyone, including individuals with disabilities and individuals coming from marginalized or disadvantaged groups. They can help meet the needs of individual learners and effectively promote gender equality and incentivize innovative pedagogical, didactical and methodological approaches.
4. Stakeholders in the formal, non-formal and informal sectors (where appropriate) in this Recommendation include: teachers, educators, learners, governmental bodies, parents, educational providers and institutions, education support personnel, teacher trainers, educational policy makers, cultural institutions (such as libraries, archives and museums) and their users, information and communications technology (ICT) infrastructure providers, researchers, research institutions, civil society organizations (including professional and student associations), publishers, the public and private sectors, intergovernmental organizations, copyright holders and authors, media and broadcasting groups and funding bodies.

II. AIMS AND OBJECTIVES

5. One key prerequisite to achieve SDG 4 is sustained investment and educational actions by governments and other key education stakeholders, as appropriate, in the creation, curation, regular updating, ensuring of inclusive and equitable access to, and effective use of high quality educational and research materials and programmes of study.

6. As is articulated in the 2007 Cape Town Open Education Declaration and the 2012 Paris OER Declaration, the application of open licenses to educational materials introduces significant opportunities for more cost-effective creation, access, re-use, re-purpose, adaptation, redistribution, curation, and quality assurance of those materials, including, but not limited to translation, adaptation to different learning and cultural contexts, development of gender-sensitive materials, and the creation of alternative and accessible formats of materials for learners with special educational needs.

7. In addition, the judicious application of OER, in combination with appropriate pedagogical methodologies, well-designed learning objects and the diversity of learning activities, can provide a broader range of innovative pedagogical options to engage both educators and learners to become more active participants in educational processes and creators of content as members of diverse and inclusive knowledge societies.

8. Furthermore, regional and global collaboration and advocacy in the creation, access, re-use, re-purpose, adaptation, redistribution and evaluation of OER can enable governments and education providers to evaluate the quality of the open access content and to optimise their own investments in educational and research content creation, as well as ICT infrastructure and curation, in ways that will enable them to meet their defined national educational policy priorities more cost-effectively and sustainably.

9. Noting these potential benefits, the objectives and areas of action of this Recommendation are as follows:

(i) Capacity building: developing the capacity of all key education stakeholders to create, access, re-use, re-purpose, adapt, and redistribute OER, as well as to use and apply open licenses in a manner consistent with national copyright legislation and international obligations;

(ii) Developing supportive policy: encouraging governments, and education authorities and institutions to adopt regulatory frameworks to support open licensing of publicly funded educational and research materials, develop strategies to enable the use and adaptation of OER in support of high quality, inclusive education and lifelong learning for all, supported by relevant research in the area;

(iii) Effective, inclusive and equitable access to quality OER: supporting the adoption of strategies and programmes including through relevant technology solutions that ensure OER in any medium are shared in open formats and standards to maximize equitable access, co-creation, curation, and searchability, including for those from vulnerable groups and persons with disabilities;

(iv) Nurturing the creation of sustainability models for OER: supporting and encouraging the creation of sustainability models for OER at national, regional and institutional levels, and the planning and pilot testing of new sustainable forms of education and learning;

(v) Fostering and facilitating international cooperation: supporting international

cooperation between stakeholders to minimize unnecessary duplication in OER development investments and to develop a global pool of culturally diverse, locally relevant, gender-sensitive, accessible, educational materials in multiple languages and formats.

III. AREAS OF ACTION

10. This Recommendation addresses five objectives: (i) building capacity of stakeholders to create, access, re-use, adapt and redistribute OER; (ii) developing supportive policy; (iii) encouraging inclusive and equitable quality OER; (iv) nurturing the creation of sustainability models for OER, and (v) facilitating international cooperation.

(i) Building capacity of stakeholders to create, access, re-use, adapt and redistribute OER

11. Member States are recommended to strategically plan and support OER capacity building, awareness raising, use, creation and sharing at the institutional and national levels, targeting all education sectors and levels. Member States are encouraged to consider the following:

(a) building awareness among relevant stakeholder communities on how OER can increase access to educational and research resources, improve learning outcomes, maximize the impact of public funding, and empower educators and learners to become co-creators of knowledge;

(b) providing systematic and continuous capacity building (in-service and pre-service) on how to create, access, make available, re-use, adapt, and redistribute OER as an integral part of training programmes at all levels of education, including assistance in initial training programmes for educators. This should include improving the capacity of public authorities, policy makers, as well as quality development and assurance professionals to understand OER and support their integration into learning, teaching, research and everyday life;

(c) raising awareness concerning exceptions and limitations for the use of copyrighted works for educational and research purposes. This should be enacted to facilitate the integration of a wide range of works in OER, recognizing that the fulfilment of educational goals as well as the development of OER requires engagement with existing copyright protected works.

(d) leveraging open licensed tools, platforms with interoperation of metadata, and standards (including national and international) to help ensure OER can be easily found, accessed, re-used, adapted and redistributed in a safe, secure and privacy-protected mode. This could include free and open source authoring tools, libraries and other repositories and search engines, systems for long-term preservation and frontier technologies for automatic OER processing and translation of languages (where appropriate or needed), such as artificial intelligence methods and tools;

(e) making available easily accessible resources that provide information and assistance to all OER stakeholders on OER-related topics, including copyright and open licensing of educational material; and

(f) promoting digital literacy skills in order to master technical use of software, codes and open licenses with a view to encouraging the development and use of OER.

(ii) Developing supportive policy

12. Member States, according to their specific conditions, governing structures and constitutional provisions, should develop or encourage policy environments, including those at the institutional and national levels, that are supportive of effective OER practices. Through a transparent participatory process that includes dialogue with stakeholders, Member States are encouraged to consider the following:

(a) developing and implementing policies and/or regulatory frameworks which encourage educational resources developed with public funds that are openly licensed or dedicated to the public domain as appropriate, and allocating financial and human resources for the implementation and evaluation of policies;

(b) encouraging and supporting institutions to develop or update legal or policy frameworks to stimulate the creation, access, re-use, re-purpose, adaptation and redistribution of quality OER by educators and learners in a manner consistent with national copyright legislation and international obligations; and to develop and integrate a quality assurance mechanism for OER into the existing quality assurance strategies for teaching and learning materials;

(c) developing mechanisms to create communities of practice, promote teacher professional development using OER, create networks of experts of OER and properly recognize OER creation as a professional or academic merit;

(d) developing mechanisms to support and incentivize all stakeholders to publish source files and accessible OER using standard open file formats in public repositories;

(e) embedding OER policies into national policy frameworks and strategies and aligning them with other open policies and guiding principles such as those for Open Access, Open Data, Open Source Software and Open Science;

(f) addressing the inclusion of OER in transforming education, adjusting, enriching or reforming curricula and all forms of learning so as to exploit OER potentials and opportunities, and encouraging the integration of different teaching methods and forms of assessment to motivate the active use, creation and sharing of OER; and assessing the impact of OER on inclusive and equitable quality education;

(g) encouraging and supporting research on OER, through relevant research programmes on OER development, sharing and evaluating, including the support of digital technologies (such as artificial intelligence); and

(h) developing and implementing policies that apply the highest standards to privacy and data protection during the production and use of OER, OER infrastructure and related services.

(iii) Encouraging effective, inclusive and equitable access to quality OER

13. Member States are encouraged to support the creation, access, re-use, re-purpose, adaptation and redistribution of inclusive and equitable quality OER for all stakeholders. These would include those learners in formal and non-formal education contexts irrespective of, inter alia, age, gender, physical ability, and socio-economic status, as well as those in vulnerable situations, indigenous peoples, those in remote rural areas (including nomadic populations), people residing in areas affected by conflicts and natural disasters, ethnic minorities, migrants, refugees, and displaced persons. In all instances, gender equality should be ensured, and particular attention

paid to equity and inclusion for learners who are especially disadvantaged due to multiple and intersecting forms of discrimination. Member States are recommended to consider the following:

- (a) ensuring access to OER that most suitably meets both the needs and material circumstances of target learners and the educational objectives of the courses or subjects for which they are being provided. This would include offline (including printed) modalities for accessing resources where appropriate;
- (b) supporting OER stakeholders to develop gender-sensitive, culturally and linguistically relevant OER, and to create local language OER, particularly in indigenous languages which are less used, under-resourced and endangered;
- (c) ensuring that the principle of gender equality, non-discrimination, accessibility and inclusiveness is reflected in strategies and programmes for creating, accessing, re-using, adapting, and redistributing OER;
- (d) ensuring public investments and incentivizing private investments in ICT infrastructure and broadband, as well as other mechanisms, to provide increased access to OER, particularly for low-income, rural and urban communities;
- (e) incentivizing the development and research of OER; and
- (f) developing and adapting existing evidence-based standards, benchmarks and related criteria for the quality assurance of OER, as appropriate, which emphasize reviewing educational resources (both openly licensed and not openly licensed) under regular quality assurance mechanisms.

(iv) Nurturing the creation of sustainability models for OER

14. Member States, according to their specific conditions, governing structures and constitutional provisions, are recommended to support and encourage the development of comprehensive, inclusive and integrated OER sustainability models. Member States are encouraged to consider the following:

- (a) reviewing current provisions, procurement policies and regulations to expand and simplify the process of procuring quality goods and services to facilitate the creation, ownership, translation, adaptation, curation, sharing, archiving and preservation of OER, where appropriate, as well as to develop the capacity of all OER stakeholders to participate in these activities;
- (b) catalyzing sustainability models, not only through traditional funding sources, but also through non-traditional reciprocity-based resource mobilization, through partnerships, networking, and revenue generation such as donations, memberships, pay what you want, and crowdfunding that may provide revenues and sustainability to OER provision while ensuring that costs for accessing essential materials for teaching and learning are not shifted to individual educators or students;
- (c) promoting and raising awareness of other value-added models using OER across institutions and countries where the focus is on participation, co-creation, generating value collectively, community partnerships, spurring innovation, and bringing people together for a common cause;
- (d) enacting regulatory frameworks that support the development of OER products and related services that align with national and international standards as well as the interest and values of the OER stakeholders;

- (e) fostering the faithful linguistic translation of open licenses as defined in this Recommendation to ensure their proper implementation;
- (f) providing mechanisms for the implementation and application of OER, as well as encouraging the feedback from stakeholders and constant improvement of OER; and
- (g) optimizing existing education and research budgets and funds efficiently to source, develop and continuously improve OER models through inter-institutional, national, regional and international collaborations.

(v) Promoting and reinforcing international cooperation

15. To promote the development and use of OER, Member States should promote and reinforce international cooperation among all relevant stakeholders, whether on a bilateral or multilateral basis. Member States are encouraged to consider the following:

- (a) promoting and stimulating cross-border collaboration and alliances on OER projects and programmes, leveraging existing transnational, regional and global collaboration mechanisms and organizations. This should include joining efforts on collaborative development and use of OER as well as capacity building, repositories, communities of practice, joint research on OER and solidarity between all countries regardless of their state of OER development;
- (b) establishing regional and international funding mechanisms for promoting and strengthening OER and identifying those mechanisms, including partnerships, that can support international, regional and national efforts;
- (c) supporting the creation and maintenance of effective peer networks that share OER, based on areas such as subject matter, language, institutions, regions and level of education at local, regional and global levels;
- (d) incorporating, where appropriate, specific clauses relating to OER in international agreements concerned with cooperation in the fields of education;
- (e) exploring the development of an international framework for copyright exceptions and limitations for education and research purposes to facilitate cross-border exchange and cooperation on OER; and
- (f) supporting the contribution of intercultural communication skills, the management of multicultural groups, the design of communities of practice and community adjustment strategies in the local implementation of OER to promote universal values.

IV. MONITORING

16. Member States should, according to their specific conditions, governing structures and constitutional provisions, monitor policies and mechanisms related to OER using a combination of quantitative and qualitative approaches, as appropriate. Member States are encouraged to consider the following:

- (a) deploying appropriate research mechanisms to measure the effectiveness and efficiency of OER policies and incentives against defined objectives;
- (b) collecting and disseminating progress, good practices, innovations and research reports on OER and its implications with the support of UNESCO and international open education communities; and

(c) developing strategies to monitor the educational effectiveness and long-term financial efficiency of OER, which include participation of all relevant stakeholders. Such strategies could focus on improving learning processes and strengthening the connections between findings, decision-making, transparency, and accountability for inclusive and equitable quality education and research.

A2: ONLINE/OFFLINE PEDR REPORTING FORM

Table A1: List of Current and Foreseen scientific (peer reviewed) publications:

NO	Planned or Performed	Type of Scientific Publication	Title of the publication	DOI or Repository Link	ISSN	Organization(s)	Authors' Names	Title of the Journal/Proceedings/Book Series or equivalent	Number, Date or frequency of the Journal/Proceedings/Book or equivalent ¹	Publisher	Place of publication	Year of Publication	Relevant pages ²	Is this a joint public/private publication? ³	Is this a peer reviewed publication? ⁴	Is this publication available in Open Access (OA) or will it be made available? ⁵
1.	Planned	Publication in conference proceeding/workshop	Design in the Wild: Interfacing the OER learning journey	N/A	N/A	UCL	Stefan Kreitmayer (UCL), Yvonne Rogers (UCL), John Shawe Taylor (UCL)	BCS, The Chartered Institute for IT (ACM Proceedings) 32nd Human Computer Interaction Conference	Monday, May 7, 2018	N/A	Belfast	2018	N/A		No	Yes Green OA
2.	Planned		Anforderungen von Lehrenden an ein OER-Portal für Hochschulen	N/A	N/A	UOS	Frank Ollermann (UOS)	virtUOS Working Papers	Monday, December 31, 2018	N/A	Osnabrück, Germany	2018	N/A		No	Yes Green OA
3.	Planned	Publication in conference proceeding/workshop	Novel interfaces to support engagement and reflection in personalised online learning	N/A	N/A	UCL	Stefan Kreitmayer (UCL)	Learning @ Scale 2018	Tuesday, June 26, 2018	N/A	London, UK	2018	N/A		No	Yes Green OA

¹ Please insert: i) the number of the journal, and/or ii) the month of the publication, and/or iii) the year of the publication

² [Please insert the first page of the publication] - [Please insert the last page of the publication]

³ Please confirm or not that this is a joint publication coming from public and private project participants (Yes/No).

⁴ Please indicate whether this is a peer review publication or not (Yes/No).

⁵ Possible options: "Yes - Green OA", "Yes - Gold OA", No. If you select "Yes - Green OA", then please insert the length of embargo (if any). If you select "Yes - Gold OA", then please insert the amount of processing charges in EUR (if any).

Green Open Access: Beneficiaries can deposit the final peer reviewed manuscript in a repository of their choice. A repository for scientific publications is an online archive. Institutional, subject-based and centralised repositories are all acceptable choices; repositories that claim rights over deposited publications and preclude access are not. Beneficiaries must ensure open access to the publication within at most 6 months.

Gold Open Access: Researchers can also publish in open access journals, or in hybrid journals that both sell subscriptions and offer the option of making individual articles openly accessible. Monographs can also be published either on a purely open access basis or using a hybrid business model. Article processing charges (APCs) for gold open access are eligible for reimbursement during the duration of the project. As stated, the article must also be made accessible through a repository upon publication.

4.	Performed	Publication in conference proceeding/workshop	Preparing multi-modal data for natural language processing	N/A	N/A	JSI	Erik Novak (JSI), Jasna Urbančič (JSI)	SiKDD 2018	Thursday, October 11, 2018	N/A	Ljubljana, Slovenia	2018	N/A		No	Yes Green OA
5.	Performed	Publication in conference proceeding/workshop	<i>Future Learner Experiences with AI and Open Educational Resources</i>	N/A	N/A	UCL	Stefan Kreitmayer (UCL), Sahan Bulathwela (UCL)	CHI 2019	Saturday, May 4, 2019	N/A	Glasgow, UK	2019	NA		Yes	Yes Gold OA
6.	Planned	Publication in conference proceeding/workshop	<i>Predicting Engagement of Video Lectures: Towards Quality Assurance in Open Education</i>	N/A	N/A	UCL	Sahan Bulathwela (UCL), Emine Yilmaz (UCL), John Shawe Taylor (UCL)	EDM 2019	Tuesday, July 2, 2019	N/A	Montréal, Canada	2019	NA		Yes	Yes Gold OA
7.	Planned	Publication in conference proceeding/workshop	<i>TrueLearn: Bayesian approaches to match lifelong learners to Open Educational Resources</i>	N/A	N/A	UCL	Sahan Bulathwela (UCL), Emine Yilmaz (UCL), John Shawe Taylor (UCL)	NeurIPS 2019	Monday, December 9, 2019	N/A	Vancouver, Canada	2019	NA		Yes	Yes Gold OA
8.	Performed	Publication in conference proceeding/workshop	<i>Towards Automatic, Scalable Quality Assurance in Open Education</i>	N/A	N/A	UCL	Sahan Bulathwela (UCL), Emine Yilmaz (UCL), John Shawe Taylor (UCL)	IJCAI 2019	Saturday, August 10, 2019	N/A	Macau, China	2019	NA		Yes	Yes Green OA
9.	Performed	Publication in conference proceeding/workshop	<i>The MLLP-UPV Supervised Machine Translation Systems for WMT19 News Translation Task. In Proc. of Fourth Conference on Machine Translation</i>	N/A	N/A	UPV	Alfons Juan (UPV), Gonçal Garcés Díaz-Munío (UPV)	WMT19		N/A	Florence, Italy	2019	NA		Yes	Yes Green OA
10.	Performed	Publication in conference proceeding/workshop	<i>The MLLP-UPV Spanish-Portuguese and Portuguese-Spanish Machine Translation Systems for WMT19 Similar Language Translation Task. In Proc. of</i>	NA	NA	UPV	Alfons Juan (UPV)	WMT19		N/A	Florence, Italy	2019	NA		Yes	Yes Green OA

			<i>Fourth Conference on Machine Translation</i>													
11.	Performed	Publication in conference proceeding/workshop	<i>Real-time One-pass Decoder for Speech Recognition Using LSTM Language Models Inproceedings. In Proc. of the 20th Annual Conf. of the ISCA</i>	NA	NA	UPV	Alfons Juan (UPV)	Interspeech 2019		N/A	Graz, Austria	2019	NA	Yes	Yes Green OA	
12.	Performed	Publication in conference proceeding/workshop	<i>The MLLP-UPV German-English Machine Translation System for WMT18. In Proc. of the Third Conference on Machine Translation (WMT18), Volume 2: Shared Task Papers, pp. 422–428</i>	NA	NA	UPV	Alfons Juan (UPV), Gonçal Garcés Díaz-Munío (UPV)	WMT18		N/A	Brussels, Belgium	2018	NA	Yes	Yes Green OA	
13.	Performed	Publication in conference proceeding/workshop	<i>Speaker-Adapted Confidence Measures for ASR using Deep Bidirectional Recurrent Neural Networks. IEEE/ACM Transactions on Audio, Speech, and Language Processing, 26 (7), pp. 1194–1202, 2018</i>	NA	NA	UPV	Alfons Juan (UPV)	IEEE/ACM		N/A	N/A	2018	N/A	Yes	Yes Gold OA	
14.	Performed	Publication in conference proceeding/workshop	<i>MLLP-UPV and RWTH Aachen Spanish ASR Systems for the IberSpeech-RTVE 2018 Speech-to-Text Transcription Challenge. In Proc. of IberSPEECH 2018: 10th Jornadas en Tecnologías del Habla and 6th Iberian SLTech Workshop, pp. 257–261, Barcelona (Spain), 2018.</i>	NA	NA	UPV	Alfons Juan (UPV)	IberSPEECH 2018		N/A	N/A	2018	N/A	Yes	Yes Green OA	
15.	Planned	Publication in conference proceeding/workshop	Preferences of Users in OER Recommendations	NA	NA	JSI	Erik Novak (JSI)	SiKDD 2019	Monday, October 7, 2019	N/A	Ljubljana, Slovenia	2019	N/A	No	Yes Green OA	

16.	Planned		Anforderungen von Lehrenden an ein OER-Portal für Hochschulen	N/A	N/A	UOS	Frank Ollermann (UOS)	virtUOS Working Papers	Monday, December 31, 2018	N/A	Osnabrück, Germany	2018	N/A		No	Yes Green OA
17.	Performed	Publication in conference proceeding/workshop	Towards an Integrative Educational Recommender for Lifelong Learners (Student Abstract)	https://doi.org/10.1609/aaai.v34i10.7151	NA	UCL	Sahan Bulathwela (UCL), Emine Yilmaz (UCL), John Shawe Taylor (UCL)	AAAI 2020	February, 2020	PKP	New York, USA	2019			Yes	Yes Gold OA
18.	Performed	Publication in conference proceeding/workshop	TrueLearn: A Family of Bayesian Algorithms to Match Lifelong Learners to Open Educational Resources	https://doi.org/10.1609/aaai.v34i01.5395	NA	UCL	Sahan Bulathwela (UCL), Emine Yilmaz (UCL), John Shawe Taylor (UCL)	AAAI 2020	February, 2020	PKP	New York, USA	2019			Yes	Yes Gold OA
19.	Performed	Publication in conference proceeding/workshop	SUM'20: State-based User Modelling	https://doi.org/10.1145/3336191.3371883	NA	UCL, K4A, NA	Sahan Bulathwela (UCL), Davor Orlic (K4A), Colin de la Higuera (NA), Emine Yilmaz (UCL), John Shawe Taylor (UCL)	WSDM 2020	February, 2020	ACM	Houston, TX, USA	2019			yes	Yes Green OA
20.	Performed	Publication in conference proceeding/workshop	What's in it for me?: Augmenting Recommended Learning Resources with Navigable Annotations	https://dl.acm.org/doi/abs/10.1145/3379336.3381457	NA	UCL	Sahan Bulathwela (UCL), Stefan Kreitmayer (UCL)	IUI 2020	Sunday, March 1, 2020	ACM	Cagliari, Italy	2019			yes	Yes Green OA
21.	Performed	Publication in conference proceeding/workshop	Predicting Engagement in Video Lectures	https://educationaldatamining.org/files/conferences/EDM2020/papers/paper_62.pdf	NA	UCL, K4A, NA	Sahan Bulathwela (UCL), Emine Yilmaz (UCL), John Shawe Taylor (UCL)	EDM 2020	Wednesday, July 1, 2020	EDM	Virtual	2019			yes	Yes Gold OA
22.	Performed	Article in Journal	Report on the WSDM 2020 Workshop on State-based User Modelling (SUM'20)	http://sigir.org/wp-content/uploads/2020/0	NA	UCL	Sahan Bulathwela (UCL), Davor Orlic (K4A), Colin de la Higuera (NA), Emine Yilmaz		Wednesday, July 1, 2020			2019			yes	Yes Gold OA

				6/p07.pdf			(UCL), John Shawe Taylor (UCL)									
23.	Performed	Publication in conference proceeding/workshop	Accessibility recommendation system [O-113]	https://oer20.oerconf.org/sessions/o-113/	NA	UCL, K4A	Sahan Bulathwela (UCL), Davor Orlic (K4A)	OER 2020	Wednesday, April 1, 2020		London, UK	2019			yes	Yes Gold OA

Table A2: List of Performed & Planned dissemination activities													
N O.	Planned or Performed	Type of activities ⁶	Organization	Authors' Name(s)	Description	Title of the Disseminated Material	Title of the disseminated material	Publisher	Date	Type of audience ⁷	Size of audience	Geographic coverage	
1	Performed	Participation to a workshop	JSI, K4A	Davor Orlic (K4A), Mitja Jermol (JSI)	We attended an exciting event in Brussels on the 17th October 2017, in order to spark collaboration among all H2020 media related projects managed by Unit DG CONNECT-I4.	X5GON project overview (Poster presentation)	H2020 Media Projects' Workshop: Collaboration Towards the Future of Media	Brussels, Belgium	Tuesday, October 17, 2017	Scientific Community (higher education, Research), Industry	50	European	
2	Performed	Non-scientific and non-peer reviewed publications (popularised publications), Non-scientific and non-peer	JSI, MIZS	Davor Orlic (K4A), Mitja Jermol (JSI), Borut Čampelj (MIZS)	This study provides the first-ever EU-wide overview of the state of play with policies on open education involving all the 28 Member States. For each Member State, a full account of their understanding of open education and strategic policy approach is given.	X5GON described as case study in "Policy implementation and impact to date" for Slovenia	Policy Approaches to Open Education Case Studies from 28 EU Member States (OpenEdu Policies)	Luxembourg: Publications Office of the European Union, 2017	Tuesday, January 16, 2018	Scientific Community (higher education, Research), Policy makers	1000	European	

⁶ Possible options: Organisation of a Conference, Organisation of a workshop, Press release, Non-scientific and non-peer reviewed publication (popularised publication), Exhibition, Flyers, Training, Social media, Website, Communication campaign (e.g. radio, TV), Participation to a conference, Participation to a workshop, Participation to an event other than a conference or workshop, Video/film, Brokerage event, Pitch event, Trade fair, Participation in activities organised jointly with other H2020 project(s), Other

⁷ Possible options: Scientific Community (higher education, Research), Industry, Civil Society, General Public, Policy makers, Medias, Investors, Customers, Other

		reviewed publications (popularised publications)										
3	Performed	Participation to a conference	JSI, K4A	Davor Orlic (K4A)	Creative Commons Summit 2018 is an annual meeting that celebrates the culture of sharing, and provides a space for open communities to collectively grow a vibrant, usable commons, powered by collaboration.	X5GON project overview (presentation)	Presentation on machine translation for open content and OER aggregation platform @ Creative Commons Summit	Toronto, Canada	Sunday, April 22, 2018	Scientific Community (higher education, Research), Civil Society, Other	500	International
4	Performed	Participation to a conference	JSI, K4A	Davor Orlic (K4A), Mitja Jermol (JSI)	We presented the notion of AI in education and Machine Translation tools at the Mobile Learning Week, UNESCO's flagship ICT in education event. The 2018 edition, under the theme "Skills for a connected world",	X5GON project overview (presentation)	Presenting Artificial Intelligence tools for SDG4 at UNESCO	Paris, France	Thursday, March 22, 2018	Civil Society, General Public, Policy makers, Scientific Community (higher education, Research)	500	Global
5	Performed	Organisation of a workshop, Participation to a workshop, Organisation of a workshop, Policy event	JSI, K4A	Davor Orlic (K4A), Mitja Jermol (JSI)	Mobile Learning Week 2018 workshops	X5GON project overview (presentation)	Implementing the Ljubljana OER Action Plan by Building Skills via OER based Artificial Intelligence technologies	Paris, France	Sunday, March 25, 2018	Scientific Community (higher education, Research), Policy makers	50	Global

6	Performed	Organisation of a workshop, Policy event	JSI, K4A	Davor Orlic (K4A), Mitja Jermol (JSI)	Mobile Learning Week 2018 workshops	X5GON project overview (presentation)	Strategy Labs - The role of UN agencies/UN ESCO in Artificial Intelligence	Paris, France	Friday 30 March 2018	Scientific Community (higher education, Research), Civil Society, Policy makers	50	Global
7	Performed	Participation in activities organised with other H2020, Erasmus+	K4A	Davor Orlic (K4A)	MicroHE project kick-off: project addresses the hot topic in higher education in Europe today, namely developing the recognition for microcredentials and nanodegrees, for micro learning episodes, open and online.	X5GON project overview and extendibility to blockchain solutions (presentation)	MicroHE – Support Future Learning Excellence through Micro-Credentialing in Higher Education Erasmus+, EACEA/41/2016 - Forward-Looking Cooperation Projects	Heilbronn, Germany	Monday, December 4, 2017	Scientific Community (higher education, Research)	35	International
8	Performed	Policy event	K4A	Davor Orlic (K4A)	Communia international association on the digital public domain and other stakeholders organised a meeting in Brussels with the objective to familiarise ourselves with the current stakes in the copyright debate surrounding education in the light of the main legislative instrument for the ongoing review of the EU copyright Directive for Copyright in the Digital Single Market (DSM directive).	X5GON project overview and issues with open licensing	Communia strategy meeting for a better copyright for education	Brussels, Belgium	Monday, November 13, 2017	Civil Society	20	International
9	Performed	Participation to an event other than a conference, workshop, Hackathon	JSI	Mitja Jermol (JSI)	Invited by Marietje Schaake, Member of the European Parliament (MEP) as speakers to a roundtable at the Future of Technology in Education at the European Parliament	X5GON project overview and issues with open licensing	Roundtable at European Parliament on copyright and privacy	Brussels, Belgium	Tuesday, March 20, 2018	Policy makers	50	European

10	Performed	Pitch event, Participation in activities organised with other H2020, Erasmus+	K4A	Davor Orlic (K4A)	We presented X5GON at I3 Impact Innovation Invest is a 30 months CSA, an Investor Meeting – a one day event packed with insight, advice and collaboration, hosted by F6S, the world's largest platform for founders in Hackney Wick London.	X5GON project overview (presentation) and pitch to investors	I3 London 'Media Innovation & Investment' event	London, UK	Thursday, October 5, 2017	Investors	20	National
11	Performed	Presenting at event	K4A, JSI	Davor Orlic (K4A), Mitja Jermol (JSI)	We presented at the 2018 edition with participants from more than 35 countries to discuss and explore how Open Education advances educational practices around the world.	X5GON project overview (presentation 3x) on technology plan and policy issues	Open Education Consortium Global conference	Delft, Netherlands	24-26 April 2018	Scientific Community (higher education, Research)	500	European
12	Performed	Organisation of a conference	JSI	Mitja Jermol (JSI)	The University of Nova Gorica and UNESCO Chair on Open Technologies for OER organized a 5-day course on Open Education Design. Lecturers and participants came from 17 countries (Slovenia, Brazil, Fiji, France, Greece, India, Italy, South Africa, Canada, Kenya, Macedonia, Malaysia, Malta, Germany, Uzbekistan, United Kingdom, USA) .	X5GON project overview (presentation)	Closure of the first launch of a half-year on-line mentoring program Open Education for a Better World	Vipava, Slovenia	2 – 6 July, 2018	Scientific Community (higher education, Research), Civil Society, Policy makers	50	Global
13	Performed	Non-scientific and non-peer reviewed publications (popularised publications)	JSI, K4A, MIZS	Davor Orlic (K4A), Mitja Jermol (JSI), Borut Čampelj (MIZS)	Experts meeting for UNESCO Recommendation on Open Educational Resources (OER), leading the draft text formulation further to the adoption of Resolution 44 'Desirability of a standard-setting instrument on international collaboration in the field of Open Educational Resources (OER)' at the 39th Session of the UNESCO General Conference	X5GON project overview (presentation)	X5GON as global Infrastructure for OER promises to deliver the first building blocks for an open and artificial intelligence powered infrastructure to easily connect all global OER sites/silos	Paris, France	Thursday, March 29, 2018	Policy makers	50	Global

14	Performed	Lobbying meeting	JSI, K4A, MIZS	Davor Orlic (K4A), Mitja Jermol (JSI)	Setting up the Category 2 Centre on Artificial Intelligence Under the Auspices of UNESCO	X5GON project overview (presentation)	X5GON as first project in new Centre in Artificial Intelligence addressing SD4 4 - Education for All	Ljubljana, Slovenija	9-11 May, 2018	Scientific Community (higher education, Research), Policy makers, Investors	5	Global
15	Performed	Participation to a conference	K4A	Davor Orlic (K4A)	We were invited to join a two days event with 35 experts from 14 countries to share knowledge and experiences at a workshop at the Research Institute for Innovation & Technology in Education (UNIR iTED) in Madrid where the discussion was on Open Education in practice.	X5GON project overview (presentation)	UNIR iTED Congress 2017: eLearning and Open Education in practice	Madrid, Spain	Monday, November 20, 2017	Scientific Community (higher education, Research)	50	International
16	Performed	Non-scientific and non-peer reviewed publications (popularised publications)	UCL, K4A	John Shawe Taylor (UCL), Davor Orlic (K4A)	Setting up the application for UNECO Chair in Artificial Intelligence Under the Auspices of UNESCO	X5GON part of application submission	X5GON as first project in portfolio of new UNESCO Chair in Artificial Intelligence addressing SD4 4 - Education for All	London, UK	Monday, April 30, 2018	Scientific Community (higher education, Research), Policy makers	20	National
17	Planned	Participation to a conference	K4A	Davor Orlic (K4A)	Online Educa Berlin	X5GON project accepted in the format of a panel presentation.	X5GON project on AI and OER building a Netflix for Open Education	Berlin, Germany	December 5 – 7, 2018	Scientific Community (higher education, Research)	500	International
18	Performed	Pitch event	K4A	Davor Orlic (K4A)	Meeting at Idea London with John Spindler, Head of Capital Enterprise	X5GON project overview (presentation)	X5GON project overview (presentation)	London, UK	Tuesday, July 17, 2018	Investors	1	Local

19	Perfor med	Organisatio n of a workshop	UCL, K4A	John Shawe Taylor (UCL), Davor Orlic (K4A)	Workshop during 2nd project meeting	X5GON project meeting	X5GON related topics and businesses	Cumberl and Lodge, UK	Tuesday , September 4, 2018	Scientifi c Commu nity (higher educati on, Resear ch), Enterpri ze	40	Local
20	Perfor med	Enterprise, Industry meeting	UCL	John Shawe Taylor (UCL), Yvonne Rogers (UCL), Davor Orlic (K4A)	Meeting with company 2U	X5GON presentatio n	X5GON business and exploitation	London, UK	Thursda y, July 19, 2018	Industr y, Enterpri ze	5	Institutio nal
21	Perfor med	Non-scientific and non-peer reviewed publications (popularised publications)	UCL	Yvonne Rogers (UCL)	UCL Interaction Design Center 2018 Newsletter	News item	X5GON – Transforming online learning into a whole new experience	London, UK	Monday, Februar y 19, 2018	Scientifi c Commu nity (higher educati on, Resear ch)	500	Institutio nal
22	Perfor med	Non-scientific and non-peer reviewed publications (popularised publications)	UCL	Sahan Bulathwela (UCL)	Mircrosoft Research AI Summer School	X5GON Poster	Towards Assessing Quality of Educational Content At Scale	Cambrid ge, UK	Thursda y, July 5, 2018	Scientifi c Commu nity (higher educati on, Resear ch)	100	Global

23	Performed	Non-scientific and non-peer reviewed publications (popularised publications)	UCL	Sahan Bulathwela (UCL)	The University of Nova Gorica and UNESCO Chair on Open Technologies for OER organized a 5-day course on Open Education Design. Lecturers and participants came from 17 countries (Slovenia, Brazil, Fiji, France, Greece, India, Italy, South Africa, Canada, Kenya, Macedonia, Malaysia, Malta, Germany, Uzbekistan, United Kingdom, USA) .	X5GON Handout	Towards Assessing Quality of Educational Content At Scale	Vipava, Slovenia	2 – 6 July, 2018	Scientific Community (higher education, Research), Civil Society, Policy makers	50	Global
24	Performed	Participation to a workshop	UPV	Alfons Juan (UPV)	LISTEN Workshop / Summer School	Multilingual videos for education	Multilingual videos for education	Bonn, Germany	July 17-19, 2018	Scientific Community (higher education, Research)	50	International
25	Planned	Participation to a conference	UPV	Gonçal Garcés Díaz-Munío (UPV)	EMNLP 2018 THIRD CONFERENCE ON MACHINE TRANSLATION	The MLLP-UPV German-English Machine Translation System for WMT18	The MLLP-UPV German-English Machine Translation System for WMT18	Brussels, Belgium	31 October – 1 November 2018	Scientific Community (higher education, Research)	100	International
26	Performed	Non-scientific and non-peer reviewed publications (popularised publications)	K4A	Davor Orlic (K4A)	UNESCO-COL -- Advisory Group, Guidelines on the Development of OER Policies	X5GON project overview (presentation)	First draft of the Guidelines on the Development of Open Educational Resources Policies.	Online	Wednesday, August 1, 2018	Policy makers	5000	Global
27	Performed	Presenting at event	UOS	Frank Ollermann (UOS)	Introduction of X5gon within a conference talk about OER adoption	Open Educational Resources	Final conference of the project GreenSkills4 VET	Osnabrück	Friday, June 15, 2018	Scientific Community (higher education, Research)	50	Regional

28	Perfor med	Presenting at event	JSI	Erik Novak (JSI)	Presentation of the X5GON project	X5GON Project Showcase	X5GON Project Showcase	London, UK	Thursday, August 23, 2018	Scientific Community (higher education, Research)	50	International
29	Perfor med	Presenting at event	K4A	Davor Orlic (K4A)	Online Educa Berlin panel Algorithms, Analytics, AI and Personalisation	X5GON Project on AI and OER Building a Netflix for Open Education		Berlin, Germany	Monday, December 10, 2018	Scientific Community (higher education, Research), Industry	50	European
30	Perfor med	Presenting at event	UOS	Rudiger Rolf (OUS)	Presentation of the X5GON project	X5GON project overview (presentation)	X5gon: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network	Zurich, CH	Friday, 18. January 2019	Scientific Community (higher education, Research)	70	Global
31	Perfor med	Presenting at event	UOS	Rudiger Rolf (OUS)	Presentation of the X5GON project	X5GON project overview (presentation)	X5gon: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network	Luzern, CH	Tuesday, 29. January 2019	Scientific Community (higher education, Research)	50	European
32	Perfor med	Presenting at event	UOS	Rudiger Rolf (OUS), Carlos Turro (UPV)	Presentation of the X5GON project	Open Educational Resources	Video in Open Educational Ressources (OER)	Vienna, Austria	Saturday, February 16, 2019	Scientific Community (higher education, Research)	80	Global

33	Performed	Participation to a conference	K4A	Davor Orlic (K4A)	Attending the UNESCO Roundtable on Artificial Intelligence: Reflection on its complexity and impact on our society	X5GON project overview and extendibility to SDG4	Artificial Intelligence and Education efforts	Paris, France	Friday, September 14, 2018	Policy makers	50	Global
34	Performed	Presenting at event	UCL, K4A	John Shawe Taylor (UCL), Davor Orlic (K4A)	UNESCO Conference on Harnessing Artificial Intelligence to advance Knowledge Societies and Good Governance, An Open Discussion following the Internet Governance Forum (IGF) 2018, Mozilla Foundation. Contribution to Session 1: AI Advocacy, Session 4: Understanding Openness and inclusiveness in the age of advanced ICTs	X5GON technologies fit for Global South reuse	Artificial Intelligence and Education efforts	Paris, France	Friday, November 15, 2019	Policy makers	150	Global
35	Performed	Organisation of a workshop	NA	Colin de la Higuera (NA)	X5GON workshop before 3rd meeting - This international workshop is part of the 3rd X5GON meeting - an EU funded project on Media Convergence, under H2020 Leadership in enabling and industrial technologies	X5GON workshop	X5GON Project Showcase and presentations related to open education, OER repositories, language technologies, personalisation, policy actions and more	Nantes, France	Tuesday, October 16, 2018	Scientific Community (higher education, Research)	50	Institutional
36	Performed	Participation to a conference	K4A	Davor Orlic (K4A)	We have been given VIP tickets to attend the World Summit in AI			Amsterdam, Netherlands	Monday, October 22, 2018	Industry, Investors, Enterprise	1000	European

37	Performed	Presenting at event	K4A	Davor Orlic (K4A)	UNESCO First High-level Forum on AI in Africa - The Forum's objective is to enrich the global reflection on artificial intelligence by drawing up a complete inventory of the situation and towards an assessment of an African scale, by taking into account challenges, opportunities and issues specific to local contexts. Plenary session "Universal Access to Information and Knowledge, and Artificial intelligence in Africa"	Contribution to Outcome Statement of the Forum on Artificial Intelligence in Africa Benguérir (Kingdom of Morocco), December 13, 2018		Benguérir, Morocco	Thursday, December 12, 2019	Policy makers	150	Global
38	Performed	Presenting at event	JSI, PO	Kristijan Perčić (PO), Mitja Jermol (JSI)	EU Media Convergence and Social Media Concertation meeting - We attended the Concertation meeting in Brussels, with the objective to bring together projects to discuss and share, to learn from each other and to find synergies and possibilities for future collaborations.	X5GON project overview (presentation)	X5gon: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network	Brussels, Belgium	Saturday, February 9, 2019	Scientific Community (higher education, Research)	50	European
39	Performed	Presenting at event	K4A, UCL	John Shawe Taylor (UCL), Davor Orlic (K4A)	Presenting at the introductory panel for major flagship UNESCO conference "Principles for AI: Towards a Humanistic Approach"	X5GON technologies extendable to fit UNESCO OER Recommendation and all UNESCO Member States (Q/A session)	X5gon: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network	Paris, France	Monday, March 4, 2019	Policy makers	800	Global
40	Performed	Presenting at event	K4A, UCL	John Shawe Taylor (UCL), Davor Orlic (K4A)	UNESCO workshop Workshop on Artificial Intelligence in Knowledge Societies: A ROAM Approach	X5GON technologies extendable to all UNESCO Member States (Q/A session)	X5gon: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network	Paris, France	Monday, March 4, 2019	Scientific Community (higher education, Research), Policy makers	50	Global

41	Perfor med	Organisatio n of a workshop	JSI, K4A, MIZS	Davor Orlic (K4A), Mitja Jermol (JSI)	UNESCO Mobile Learning Week 2019 - Workshop on using AI and OER data – convergence among OER platforms offers unprecedented opportunities	X5GON project overview for policymakers in UNESCO Member States (presentation)	X5gon: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network	Paris, France	Saturday, March 9, 2019	Policy makers	50	Global
42	Perfor med	Organisatio n of a workshop	UOS	Rudiger Rolf (OUS), Frank Ollermann (UOS)	X5GON workshop before 4th meeting - This international workshop is part of the 4th X5GON meeting and will focus on sustainability solutions for OER technologies	X5GON workshop	X5gon: Project Showcase and presentations related to open education, OER repositories, language technologies, personalisation, policy actions and more	Osnabrück, Germany	Tuesday, March 12, 2019	Scientific Community (higher education, Research)	50	National
43	Perfor med	Organisatio n of a workshop	K4A, UCL	Davor Orlic (K4A), John Shawe Taylor (UCL)	Workshop within the AI4D initiative in sub-Saharan Africa - Toward a Network of Excellence in Artificial Intelligence for Development (AI4D) in sub-Saharan Africa	X5GON exploitation efforts in Sub-Saharan Africa	X5gon: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network	Nairobi, Kenya	April 3-5, 2019	Scientific Community (higher education, Research), Industry	60	Global
44	Perfor med	Communication campaign (e.g radio, TV)	UCL	John Shawe Taylor (UCL)	Interview at Workshop “Toward a Network of Excellence in Artificial Intelligence for Development (AI4D) in sub-Saharan Africa”	Showcase X5GON as feasible technology for online education in Global South	X5gon: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network	Berlin, Germany	April 11, 2019	General Public	50	Global

45	Performed	Lobbying meeting, Press Release	JSI, PO	Kristijan Perčič (PO), Iztok Renčelj (PO), Mitja Jermol (JSI)	Pošta Slovenije, in cooperation with the Jožef Stefan Institute, both partners in X5GON handed over part of new office spaces in Ljubljana to four high-tech startups. X5GON was showcased as a unique project connecting the two partners.	X5GON project overview (presentation)	X5gon: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network	Ljubljana, Slovenija	Tuesday, April 16, 2019	Industry	60	National
46	Performed	Presenting at event	UPV	Alfons Juan (UPV)	SCIC-Universities conference, Interpretation - Preparing for Interpreting 3.0	X5GON project overview (presentation)	X5gon: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network		Thursday, April 4, 2019	Industry	50	European
47	Performed	Presenting at event	K4A	Davor Orlic (K4A)	Slovenian Open Knowledge Day - X5GON was presented as one of the main platforms using Wikipedia as its base technology with the Wikifier at its core. The presentation followed Jan Gerlach, from the Wikimedia Foundation at the Slovenian Open Knowledge Day	X5GON project overview and relevance of creating the Wikifier in the core of the X5GON platform to Wikipedia (presentation)	X5gon: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network	Ljubljana, Slovenija	Monday, May 6, 2019	Civil Society	50	National
48	Performed	Presenting at event	K4A	Davor Orlic (K4A)	Slovenian Rectors' Conference - Transformation of the Educational Process in the age of Digitisation	Rectors conference discussing Open Education and X5GON technologies (Q/A session with moderator)	X5gon: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network	Vipava, Slovenia	Thursday, May 23, 2019	Scientific Community (higher education, Research)	100	National

49	Performed	Lobbying meeting	JSI, MIZS	Mitja Jermol (JSI)	UNESCO OER Recommendation final meeting - The UNESCO OER Recommendation was approved by UNESCO member states on 28th May, by consensus. Its final step for approval will take place at the UNESCO General Assembly in November, 2019. X5GON is the technology to be offered to Member States to implement the policy.	X5GON project overview for policymakers in UNESCO Member States (presentation)	X5gon: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network	Paris, France	Tuesday, May 28, 2019	Policy makers	80	Global
50	Performed	Organisation of a workshop	K4A, MIZS	Davor Orlic (K4A), Borut Čampelj (MIZS)	PLA, Peer Learning Activities, EAC - DG Education and Culture, ET2020 Working Group Digital Education: Learning, Teaching and Assessment	X5GON project overview for policymakers in EU Member States (presentation)	X5GON Co-design workshop	Ljubljana, Slovenija	26-28 June 2019	Policy makers	50	European
51	Performed	Organisation of a workshop	JSI, K4A	Davor Orlic (K4A), Mitja Jermol (JSI)	International Open Education Design Workshop - run by UNESCO Chair on Open Technologies for OER and Open Learning at the Jožef Stefan Institute (JSI). The Workshop programme is tailored to cover the topics relevant to Open Education.	X5GON Handout and Testing	Towards Assessing Quality of Educational Content At Scale	Vipava, Slovenia	July 1 to 5, 2019	General Public, Civil Society	50	Global
52	Performed	Participation to an event other than a conference, workshop, Hackathon	JSI, K4A	Davor Orlic (K4A), Mitja Jermol (JSI)	Mentoring Programme – Open Education for a better world - The mentoring programme 2019 supported 35 mentees ensuring they settle in quickly and are able to achieve their potential and is specifically designed for each of the problems they are trying to solve under the supervision of 41 mentors.	X5GON Handout and Testing	Towards Assessing Quality of Educational Content At Scale	Ljubljana, Slovenija	August 2019 to July 2019	General Public, Civil Society	70	Global
53	Planned	Organisation of a workshop	K4A, NA	Davor Orlic (K4A), Colin de la Higuera (NA)	IJCAI workshop on AI and the United Nations SDGs - The Workshop is based on the proposition of X5GON being a technology fit for purpose to solve SD4 to Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	X5GON project overview (presentation)	X5gon: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network	Macao, China	Sunday, August 11, 2019	Scientific Community (higher education, Research)	50	Global

54	Performed	Presenting at event	JSI	Erik Novak (JSI)	Invited talk at IJCAI workshop on AI and the United Nations SDGs	X5GON project overview (presentation)	Presentation on X5GON platform and fitting into SDG framework	Macao, China	Sunday, August 11, 2019	Scientific Community (higher education, Research)	50	Global
55	Planned	Organisation of a hackathon	UCL	John Shawe Taylor (UCL)	G7 Hackathon - A Hackathon supporting open education for NGOs and low income communities with AI driven applications	Using techniques and technologies from X5GON, a Hackathon is to be run with UCL in the UK leading the design and management with three phases, from October to early December.	X5gon: Cross Modal, Cross Cultural, Cross Lingual, Cross Domain, and Cross Site Global OER Network	Paris, France	December 5 – 7, 2019	Industry	50	European
56	Planned	Non-scientific and non-peer reviewed publications (popularised publications)	JSI, K4A	Davor Orlic (K4A), Mitja Jermol (JSI)	UNESCO publication "Artificial Intelligence and frontier technologies for OER" - X5GON is contributing to the upcoming report on the use of AI and frontier technologies for OER, together with UNESCO's Communication and Information Sector. The report is an initial scoping study trying to understand how similar technologies to X5GON can be suited to further the development and expansion of OER in achieving United Nations SDG 4.	X5GON breakdown of technologies overview in book chapter	First draft of the report.	Paris, France	December 5 – 7, 2019	General Public	5000	Global
57	Planned	Non-scientific and non-peer reviewed publications (popularised)	NA	Colin de la Higuera (NA)	UNESCO publication on teaching AI	X5GON breakdown of technologies overview in book chapter	First draft of the report.	Nantes, France	December 5 – 7, 2019	General Public	5000	Global

		publications)										
58	Performed	Participation to a workshop	UCL	Stefan Kreitmayr (UCL)	Accepted workshop contribution paper	Paper: Future Learner Experiences with AI and Open Educational Resources	Workshop: Towards a Responsible Innovation Agenda for HCI – CHI 2019	Glasgow, UK	May 4 2019	Scientific Community (higher education, Research)	100	Global
59	Performed	Participation to a workshop	UCL	Stefan Kreitmayr (UCL)	Accepted workshop contribution paper	Paper: The challenges of Learning Machine Learning for Non-technical Users or Novice Programmers	Workshop: Human-Centered Study of Data Science Work Practices	Glasgow, UK	May 5 2019	Scientific Community (higher education, Research)	100	Global
60	Performed	Presenting at event	UCL	Stefan Kreitmayr (UCL)	Poster presentation of research paper	Design in the Wild: Interfacing the OER learning journey	32nd International BCS Human Computer Interaction Conference (HCI)	Belfast, UK	Thursday, July 4, 2019	Scientific Community (higher education, Research)	1000	Global
61	Planned	Presenting at event	NA	Colin de la Higuera (NA)	A talk on AI at a local engineer school, with X5-GON presented	L'intelligence artificielle	ICAM	Nantes	Wednesday, January 30, 2019	Scientific Community (higher education, Research)	20	Local
62	Performed	Presenting at event	NA	Colin de la Higuera (NA)	A talk on social networks for the training of High school teachers	Les réseaux sociaux	Webinaires SNT	Nantes	Tuesday, March 5, 2019	Scientific Community (higher education, Research)	2000	Local

										Resear ch)		
63	Perfor med	Presenting at event	NA	Colin de la Higuera (NA)	A presentation during the X5GON event	Using MOOCs in India	X5-GON event	Osnabrü ck	Tuesday , March 12, 2019	Scientifi c Communi ty (higher educati on, Resear ch)	80	Europea n
64	Perfor med	Presenting at event	NA	Colin de la Higuera (NA)	I presented AI to an audience of Alumni from the Frenche Engineering schools. With X5-GON included	L'intelligenc e artificielle	IESF Pays de la Loire	Nantes	Thursda y, March 28, 2019	Industr y	250	Regiona l
65	Perfor med	Presenting at event	NA	Colin de la Higuera (NA)	Presentation at UNESCO	L'intelligenc e artificielle	WSIS forum 2019	Geneva	Monday, April 8, 2019	Policy makers	20	Global
66	Perfor med	Presenting at event	NA	Colin de la Higuera (NA)	A webinar toward regional audience to get them interested in working on X5-GON material	L'intelligenc e artificielle	Webinaire AILE	Nantes	Monday, May 13, 2019	Scientifi c Communi ty (higher educati on, Resear ch)	20	Regiona l
67	Perfor med	Presenting at event	NA	Colin de la Higuera (NA)	A citezrn event about the impact of AI on education. I presented X5-GON	L'intelligenc e artificielle	Former à l'intelligence artificielle pour répondre aux défis d'aujourd'hui et de demain ! aura lieu	Nantes	Wednes day, April 24, 2019	Genera l Public	40	Local
68	Perfor med	Organisatio n of a workshop	NA	Colin de la Higuera (NA)	A meeting for Human ressources specialists about AI. We gave a talk and participated to a panel.	L'intelligenc e artificielle : impact et risques.	A local event organized by Mickael Page	Nantes	Thursda y, May 16, 2019	Scientifi c Communi ty (higher educati on, Resear ch)	40	Local

69	Performed	Presenting at event	NA	Colin de la Higuera (NA)	We presented X5-GON at this event	X5GON	Journées IA	Rennes	Friday, June 21, 2019	Scientific Community (higher education, Research)	50	Regional
70	Performed	Presenting at event	NA	Colin de la Higuera (NA)	An event organized by Dell in Nantes with an audience of Dell B2B clients	L'intelligence artificielle	Dell Technologies Forum	Nantes	Tuesday, June 18, 2019	Industry	20	Regional
71	Performed	Presenting at event	NA	Colin de la Higuera (NA)	A presentation of X5-GON in the context of the doctoral school presentations.	L'intelligence artificielle	Rencontres Doctorales	Nantes	Thursday, June 6, 2019	Scientific Community (higher education, Research)	30	Institutional
72	Performed	Presenting at event	NA	Colin de la Higuera (NA)	This is a meeting of European experts for education. We gave a keynote on teaching AI and participated to the X5-GON workshop which was organized on the 28th.	Towards teaching artificial intelligence	Teaching for AI	Ljubljana	Thursday, June 27, 2019	Policy makers	60	European
73	Performed	Presenting at event	NA	Colin de la Higuera (NA)	A Unesco event on the impact of AI. We were invited to participate to a panel and give a talk.	A presentation of the report on teaching AI, at a Unesco meeting	Teaching for AI	Paris	Friday, July 12, 2019	Policy makers	40	Global
74	Performed	Presenting at event	JSI	Jasna Urbančič (JSI)	Presentation of the X5GON project	X5GON: Connecting OER Repositories	X5GON: Connecting OER Repositories	Achorage, Aljaska	Wednesday, August 7, 2019	Scientific Community (higher education, Research)	50	International
75	Performed	Policy event	MIZS	Borut Čampelj (MIZS)	Promotion at Brussels meeting - indicators in digital education (one possibility - indicator on OER and activities) - at the meeting and in breaks	X5gon engine; OER e-materials at EU	Expert meeting - indicators in digital education	EC, Brussels	Tuesday, September 11, 2018	Policy makers	30	European

76	Perfor med	Policy event	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon at Brussels meeting on Erasmus + and Horizon 2020 meeting (good experience from running and previous projects) - at the meeting and in breaks	X5gon engine; OER e-materials at EU	Expert meeting - EU projects (Erasmus +, Action 3 policy experimentation)	EC, Brussels	Tuesday, September 18, 2018	Policy makers	30	European
77	Perfor med	Participation to a workshop	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon at NEI meeting of the project NA-MA POTI - at the meeting and in breaks; possibilities of involvement of external stakeholders (for example India)	X5gon engine; OER e-materials at EU	project NA-MA POTI meeting	National Education Institute, Slovenia	Wednesday, September 19, 2018	Policy makers	1	National
78	Perfor med	Lobbying meeting	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon at SVRK meeting of the project Semena sprememb - possibilities to share OER e-materials of teachers in the project	X5gon engine; OER e-materials at EU	Dissemination to particular expert	SVRK, Ljubljana	Thursday, September 20, 2018	Policy makers	30	National
79	Perfor med	Policy event	MIZS	Borut Čampelj (MIZS)	promotion X5gon in Brussels meeting - (Digital Education: Learning, Teaching and Assessment) DELTA GROUP (OER and activities; and information for possible workshop in Slovenia at Peer learning in AI in education)	X5gon engine; OER e-materials at EU	Expert meeting - Digital Education: Learning, Teaching and Assessment (E&T 2020)	EC, Brussels	Monday, September 24, 2018	Policy makers	40	European
80	Perfor med	Participation to a conference	MIZS	Borut Čampelj (MIZS)	promotion of X5gon in meeting at the conference on digital higher education in Portoroz	X5gon engine; OER e-materials at EU	conference on digital higher education in Portoroz	Portoroz, Slovenia	Friday, September 28, 2018	Policy makers	30	National
81	Perfor med	Policy event	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon on the Conference in Austria - under presidency (good experience from running and previous projects) - at the workshops/debates and in breaks	X5gon engine; OER e-materials at EU	conference on digital education under Presidency Austria	Eisenstadt, Austria	Tuesday, October 9, 2018	Policy makers	20	European
82	Perfor med	Participation to a conference	MIZS	Borut Čampelj (MIZS)	Promotion of x5gon on the Conference in Brdo, Slovenia - at the workshops/debates and in breaks	X5gon engine; OER e-materials at EU	Conference on innovation	Brdo, Slovenia	Monday, October 22, 2018	General Public	20	National
83	Perfor med	Participation to a conference	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon at the Conference with headmasters and experts of MUNERA projects at VET (at presentation and debates during break)	X5gon engine; OER e-materials at EU	Conference on education - project MUNERA	Ljubljana, Slovenia	Thursday, October 25, 2018	General Public	40	National

84	Performed	Participation to a conference	MIZS	Borut Čampelj (MIZS)	Promotion of x5gon at the conference Digitalisation 4.0 (adult education institutions and educators) also in breaks (possibilities to use results of X5gon)	X5gon engine; OER e-materials at EU	Conference on adult education	Ljubljana, Slovenia	Thursday, November 8, 2018	General Public	25	National
85	Performed	Participation to a conference	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon at the Annual Conference with headmasters of upper-secondary schools in Slovenia (Portoroz), at the workshops and breaks	X5gon engine; OER e-materials at EU	Annual Conference with headmasters of upper-secondary schools in Slovenia	Portoroz, Slovenia	Tuesday, November 20, 2018	Policy makers	80	National
86	Performed	Policy event	MIZS	Borut Čampelj (MIZS)	Promotion of x5gon at the conference - results of 2nd survey ICT in education (including OER) - promotion in debates/breaks	X5gon engine; OER e-materials at EU	conference for policy makers - results of 2nd survey ICT in education	EC, Brussels	Friday, November 23, 2018	Policy makers	20	European
87	Performed	Participation to a workshop	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon at the NA-MA POTI project meeting with teachers and headmasters	X5gon engine; OER e-materials at EU	NA-MA POTI project meeting with teachers and headmasters	Ljubljana, Slovenia	Friday, November 30, 2018	Policy makers	30	National
88	Performed	Policy event	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon at the expert meeting in National Council of Republic Slovenia on digitalisation and platforms (in debates and breaks)	X5gon engine; OER e-materials at EU	expert meeting in National Council of Republic Slovenia on digitalisation and platforms	Ljubljana, Slovenia	Tuesday, December 4, 2018	Policy makers	15	National
89	Performed	Policy event	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon at the policy meeting - panel discussion on ICT strategy in education in Ministry of Education Croatia at panel discussion and debates and breaks	X5gon engine; OER e-materials at EU	policy meeting - panel discussion on ICT strategy in education in Ministry of Education Croatia	Zagreb, Croatia	Wednesday, December 5, 2018	Policy makers	30	Regional
90	Performed	Participation to a workshop	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon at the expert meeting of Internet Safety (Faculty of Social Sciences - coordinator of Safe.si project)	X5gon engine; OER e-materials at EU	expert meeting of Internet Safety	Ljubljana, Slovenia	Monday, December 10, 2018	Policy makers	12	National

91	Perfor med	Participatio n to a conference	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon at the conference on Public Administration (Brdo) - presentation and debates in workshops and breaks; notes from Project Management Board	X5gon engine; OER e-materials at EU	conference on Public Administration	Brdo, Slovenia	Tuesday , December 11, 2018	Genera l Public	30	National
92	Perfor med	Participatio n to a conference	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon at the conference Eminent (debates and breaks)	X5gon engine; OER e-materials at EU	conference Eminent	Lisabon, Portugal	Thursda y, December 13, 2018	Policy makers	20	Europea n
93	Perfor med	Participatio n to a conference	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon at the conference Microsoft on AI (debates in breaks)	X5gon engine; OER e-materials at EU	conference Microsoft on AI	Ljubljana , Slovenia	Tuesday , December 18, 2018	Policy makers	10	National
94	Perfor med	Policy event	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project at the peer learning meeting in Luxemburg (DELTA group and other experts; (Digital Education: Learning, Teaching and Assessment))	X5gon engine; OER e-materials at EU	peer learning meeting in Luxemburg (DELTA group and other experts)	Luxemb urg	Tuesday , January 8, 2019	Policy makers	15	Europea n
95	Perfor med	Participatio n to a conference	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project at Bett show - various stakeholders from Slovenia and other countries	X5gon engine; OER e-materials at EU	Bett show	London, UK	Thursda y, January 24, 2019	Policy makers	10	Europea n
96	Perfor med	Lobbying meeting	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project activities on OER - Dare Stojan, member of Social-economic comittee	X5gon engine; OER e-materials at EU	meeting with expert	Ljubljana , Slovenia	Monday, Februar y 4, 2019	Policy makers	1	National
97	Perfor med	Policy event	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project activities on OER, AI and platform at DELTA meeting in Brussels (E&T 2020; discussion in breaks); possible peer learning in Slovenia	X5gon engine; OER e-materials at EU	DELTA meeting in Brussels (E&T 2020)	EC, Brussels	Thursda y, Februar y 14, 2019	Policy makers	15	Europea n
98	Perfor med	Presenting at event	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project activities on OER, AI and platform Scientix conference in Beograd (discussions and possible activities in Balkan region)	X5gon engine; OER e-materials at EU	Scientix conference in Beograd	Beograd, Serbia	Friday, Februar y 22, 2019	Policy makers	100	Europea n
99	Perfor med	Policy event	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project activities on OER, AI and platform on the Management board at ARNES institution (I am member of Board)	X5gon engine; OER e-materials at EU	Management board at ARNES institution	Ljubljana , Slovenia	Thursda y, Februar y 28, 2019	Policy makers	5	Institutio nal

100	Performed	Lobbying meeting	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project activities on OER and platform in National Education Institute (Andreja Bačnik)	X5gon engine; OER e-materials at EU	meeting with expert	Ljubljana, Slovenia	Monday, March 4, 2019	Policy makers	1	Institutional
101	Performed	Participation to a workshop	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project activities on OER, AI and platform at the meeting of Listiac project (new Erasmus + project)	X5gon engine; OER e-materials at EU	meeting of Listiac project	Helsinki, Finland	Tuesday, March 19, 2019	Policy makers	18	European
102	Performed	Presenting at event	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project activities on OER, AI and platform at the Ministry of Education Singapur, National Education Institute, University of Singapur	X5gon engine; OER e-materials at EU	Meeting at Ministry of Education Singapur, National Education Institute, University of Singapur	Singapore	Monday, March 25, 2019	Policy makers	45	Global
103	Performed	Lobbying meeting	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project among headmasters and teachers from Slovenia at the excursion in Singapur	X5gon engine; OER e-materials at EU	Policy discussion with national experts in excursion in Singapur	Singapore	Tuesday, March 26, 2019	Policy makers	10	National
104	Performed	Participation to a conference	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project activities on OER, AI and platform in the conference for headmasters from Singapur and other experts (in breaks)	X5gon engine; OER e-materials at EU	conference for headmasters from Singapur and other experts	Singapore	Wednesday, March 27, 2019	Policy makers	8	International
105	Performed	Participation to a workshop	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project activities workshops in deliZnami (share with us) for co-workers	X5gon engine; OER e-materials at EU	workshops in deliZnami	Ljubljana, Slovenia	Tuesday, April 2, 2019	Policy makers	4	Institutional
106	Performed	Participation to a conference	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project activities on OER, AI and platform in the conference SELFIE in Madrid (in breaks; various experts from ministries of education, national education institutions; teachers and researchers; EUN Schoolnet)	X5gon engine; OER e-materials at EU	conference SELFIE	Madrid, Spain	Thursday, April 4, 2019	Policy makers	12	European

107	Performed	Policy event	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project activities on OER, AI and platform at the Microsoft workshop for policy makers at the Ministry, National education institutions, headmasters	X5gon engine; OER e-materials at EU	Microsoft workshop for policy makers at the Ministry, National education institutions, headmasters	Ljubljana, Slovenia	Tuesday, April 9, 2019	Policy makers	8	National
108	Performed	Organisation of a workshop	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project activities on OER, AI and platform at the National School for Leadership in Education - workshop for future headmasters	X5gon engine; OER e-materials at EU	National School for Leadership in Education - workshop for future headmasters	Ljubljana, Slovenia	Saturday, May 18, 2019	Other	8	National
109	Performed	Participation to a conference	MIZS	Borut Čampelj (MIZS)	Promotion of X5gon project activities on OER, AI and platform at Microsoft NT conference (EDU track) with Microsoft experts and headmasters and teachers in breaks; and meetings with Microsoft	X5gon engine; OER e-materials at EU	Microsoft NT conference (EDU track)	Portoroz, Slovenia	Tuesday, May 21, 2019	Policy makers	20	National
110	Performed	Policy event	MIZS	Borut Čampelj (MIZS)	promotion of X5gon project in breaks at DELTA (Digital Education: Learning, Teaching and Assessment) PLA meeting (experts on ICT in education)	X5gon engine; OER e-materials at EU	DELTA (Digital Education: Learning, Teaching and Assessment) PLA meeting (experts on ICT in education)	Ljubljana, Slovenia	Thursday, June 27, 2019	Policy makers	55	European
111	Performed	Organisation of a workshop	MIZS	Borut Čampelj (MIZS)	X5gon workshop at DELTA (Digital Education: Learning, Teaching and Assessment) peer learning (E&T 2020) (experts on ICT in education)	X5gon activities - added value; X5gon engine; OER e-materials at EU	DELTA (Digital Education: Learning, Teaching and Assessment) PLA meeting (experts on ICT in education)	Ljubljana, Slovenia	Friday, June 28, 2019	Policy makers	55	European
112	Performed	Lobbying meeting	PO	Kristijan Perčič (PO)	Presenting the x5gon project and opens for cooperation with startup Equaleyes solutions	Teachers dashboard workshop, what they need	Meeting for cooperation	Maribor, Slovenia	Wednesday, April 3, 2019	Medias	5	Local

113	Performed	Lobbying meeting	PO	Kristijan Perčič (PO)	Presenting x5gon and key functionalities	X5GON project overview (presentation)	X5GON Project Showcase	Ljubljana, Slovenia	Monday, June 3, 2019	Customers	8	Local
114	Performed	Enterprise, Industry meeting	PO	Kristijan Perčič (PO)	Presenting the x5gon project on startup event in Ljubljana - open space on PS Tržaška	X5GON project overview (presentation)	Meeting for establishing of research cloud	Maribor, Slovenia	Tuesday, April 16, 2019	Industry	100	Regional
115	Performed	Enterprise, Industry meeting	PO	Kristijan Perčič (PO)	Presenting the x5gon project to Sonja Rnjak CEEMA (Central, Eastern Europe, Middle East and Africa) and Denis Stanarevič at Hewlett Packard Enterprise	X5GON project overview (presentation)	Meeting for cooperation	Maribor, Slovenia	Thursday, May 30, 2019	Enterprise	10	Regional
116	Performed	Enterprise, Industry meeting	PO	Kristijan Perčič (PO)	Presenting x5gon to B2 - Slovenian leading e-learning company - intent for cooperation	X5GON project overview (presentation)	Presentation Introduction to Open Education for Business and Industry	Vipava, Slovenia	Tuesday, June 18, 2019	Customers	7	Local
117	Performed	Presenting at event	PO	Kristijan Perčič (PO)	Conference Open education for better world, Presenting teh OE on industry track	Introduction to OE for Business and Industry	X5GON adoption and potential for industry		Saturday, April 6, 2019	Industry	70	Global
118	Performed	Lobbying meeting	MIZS, K4A	Mojca Ifko-Pinosa (MIZS), Davor Orlic (K4A)	X5GON Presentation meeting with executives of educational institutions in Slovenia	X5GON project overview and the value of the X5GON for the educational system in the Republic of Slovenia	Exploitation meeting for SI HEIs joining X5GON Connect service	Ljubljana, Slovenia	Wednesday, September 19, 2018	Scientific Community (higher education, Research)	15	National
119	Performed	Lobbying meeting	MIZS, K4A, JSI	Mojca Ifko-Pinosa (MIZS), Davor Orlic (K4A), Erik Novak (JSI)	X5GON Presentation meeting with executives of educational institutions in Slovenia	X5GON project overview and the value of the X5GON for the educational system in the Republic of Slovenia	Exploitation meeting for SI HEIs joining X5GON Connect service	Ljubljana, Slovenia	Monday, November 19, 2018	Scientific Community (higher education, Research)	14	National

120	Performed	Lobbying meeting	MIZS, K4A, JSI	Mojca Iľko-Pinosa (MIZS), Davor Orlic (K4A), Erik Novak (JSI)	Meeting with top management of all Slovenian universities and national institutions for disabled communities.	X5GON project overview and the value of the X5GON for the educational system in the Republic of Slovenia	Exploitation meeting for SI HEIs joining X5GON Connect service	Maribor, Slovenia	Wednesday, November 28, 2018	Scientific Community (higher education, Research)	5	Institutional
121	Performed	Lobbying meeting	MIZS, K4A, JSI	Mojca Iľko-Pinosa (MIZS), Davor Orlic (K4A), Erik Novak (JSI)	Meeting with top management of University of Maribor Library	X5GON project overview and the value of the X5GON for the educational system in the Republic of Slovenia	Exploitation meeting for joining X5GON Connect service	Ljubljana, Slovenija	Wednesday, December 19, 2018	Scientific Community (higher education, Research)	5	Institutional
122	Performed	Lobbying meeting	MIZS, K4A, JSI, PO	Mojca Iľko-Pinosa (MIZS), Davor Orlic (K4A), Erik Novak (JSI), Kristijan Perčič (PO)	Meeting with Zavod za gluhe in naglušne (Institute for the Deaf and Hard of Hearing)	X5GON project overview and the value of the X5GON for the deaf and hard of hearing community in the Republic of Slovenia	Exploitation meeting for disabilities piloting of recommendation and material search	Ljubljana, Slovenija	Wednesday, December 19, 2018	Scientific Community (higher education, Research)	4	Institutional
123	Performed	Lobbying meeting	MIZS, PO	Mojca Iľko-Pinosa (MIZS), Kristijan Perčič (PO)	Meeting with Center za izobraževanje, rehabilitacijo, inkluzijo in svetovanje za slepe in slabovidne Ljubljana (Center for Education, Rehabilitation, Inclusion and Counseling for the Blind and Visually Impaired Ljubljana)	X5GON project overview and the value of the X5GON for the blind and visually impaired community in the Republic of Slovenia	Exploitation meeting for disabilities piloting of recommendation and material search	Ljubljana, Slovenija	Wednesday, December 19, 2018	Scientific Community (higher education, Research)	4	National

124	Performed	Lobbying meeting	MIZS, K4A	Mojca Ifko-Pinosa (MIZS), Davor Orlic (K4A)	Meeting with Zavod za zaposlovanje RS (Employment Service of Slovenia)	X5GON project overview and the value of the X5GON for non-formal education	Exploitation meeting for joining X5GON platform	Ljubljana, Slovenija	Thursday, April 25, 2019	Policy makers	5	Institutional
125	Performed	Participation to a conference, Participation to a hackathon	K4A	Davor Orlic (K4A)	Presentation and organisation of Deep Learning Indaba	Involvement in the organising committee and presentation of X5GON feed, API and datasets	Presentation of potential pan-African cooperation with X5GON platform	Nairobi, Kenia	Sunday, August 25, 2019	Policy makers, Scientific Community (higher education, Research), Industry	700	Global
126	Performed	Hackathon	UCL	Sahan Bulathwela (UCL)	Hackathon Jan - Innovation IT sprint of PS	X5GON API Tutorial	Hackathon - building an solutions on top of the x5gon system	Maribor, Slovenija	23.-24. jan 2020	Students, startups	110	National
127	Performed	Hackathon	UCL	Sahan Bulathwela (UCL)	Design Hackathon University College London	X5GON API Tutorial	AI for social good design hackathon	London, UK	Sep-19	Students	200	National
128	Performed	Hackathon	UCL	Sahan Bulathwela (UCL)	Hackathon University College London	X5GON API Tutorial	Hackathon - building an solutions on top of the x5gon system	London, UK	November, 2019	Students	200	National
129	Performed	Hackathon	UOS	Rüdiger Rolf (UOS)	First Presentation of local Hackathon at UOS	Hackathon promotion for local students	Kick Off-Meeting	Osnabrück, Germany	12/5/2019	Students	12	National

130	Performed	Lobbying meeting	JSI	Erik Novak (JSI)	Presentation of the X5GON project to OCAD University, Toronto	X5GON project overview (presentation)	No title	Online	Thursday, December 12, 2019	Policy makers	1	International
131	Performed	Lobbying meeting	JSI	Erik Novak (JSI)	Presentation of the X5GON project to Creative Commons	X5GON project overview (presentation)	No title	Online	Friday, January 10, 2020	Policy makers	1	International
132	Performed	Lobbying meeting	JSI	Erik Novak (JSI)	Presentation of the X5GON project to OER Africa	X5GON project overview (presentation)	No title	Online	Tuesday, January 14, 2020	Policy makers	2	International
133	Performed	Lobbying meeting	JSI	Erik Novak (JSI)	Presentation of the X5GON project to E-Campus Ontario, Canada	X5GON project overview (presentation)	No title	Online	Monday, January 20, 2020	Policy makers	1	International
134	Performed	Presenting at event, Participation to an event other than a conference, workshop, Hackathon	NA	Colin de la Higuera (NA)	21 janvier Digital Change https://www.digital-change.fr/contenu-metier/cobots-robots-et-ia-reste-il-encore-de-la-place-pour-l-homme-dans-l-entreprise Panel. Colin de la Higuera on the role of AI	Panel at "Digital Change" forum	Panel	Nantes, France	Tuesday, January 21, 2020	Enterprise	50	Local
135	performed	Hackathon	UOS	Rüdiger Rolf (UOS)	Final presentations for Hackathon contestants from Osnabrück	Hackathon	Final Presentation and selection of winners	Osnabrück, Germany	Thursday, January 30, 2020	Students	9	National
136	Performed	Lobbying meeting	JSI	Erik Novak (JSI)	Presentation of the X5GON project to COER, India	X5GON project overview (presentation)	No title	Online	Monday, February 3, 2020	Policy makers	1	International

137	Performed	Lobbying meeting	MIZS	Mojca Iľko-Pinosa (MIZS)	Meeting with director of Vocational College for Hospitality, Wellness and Tourism Bled, mag. Peter Mihelčič	X5GON project overview and the value of the X5GON for the educational system in the Republic of Slovenia with special regard of the value for schools	Exploitation meeting for joining X5GON platform	Ljubljana, Slovenia	Friday, June 12, 2020	Vocational College Community	1	Institutional
138	Performed	Presenting at event, Participation to an event other than a conference, workshop, Hackathon	NA	Colin de la Higuera (NA)	Talk at AIED 2020	Teaching AI	Talk at workshop	Vienna, Austria (Online)	Friday, July 10, 2020	Scientific Community (higher education, Research)	50	International
139	Performed	Lobbying meeting	JSI	Erik Novak (JSI)	Presentation of the X5GON project to Open Education Consortium, Brazil	X5GON project overview (presentation)	No title	Online	Wednesday, July 15, 2020	Policy makers	1	International
140	Performed	Lobbying meeting	JSI	Erik Novak (JSI)	Presentation of the X5GON project to FIOCRUZ, Brazil	X5GON project overview (presentation)	No title	Online	Monday, August 17, 2020	Policy makers	1	International
141	Performed	Presenting at event, Participation to an event other than a conference, workshop, Hackathon	NA	Colin de la Higuera (NA)	21 Septembre : Conférence IA et les Objectifs de Développement Durable. https://chaireunescorel.is2n.fr/2020/08/27/conference-en-ligne-ia-et-objectifs-de-developpement-durable/	Seminar on AI and the SDGs	Seminar	Nantes, France	Monday, September 21, 2020	General Public	2000 views online	National

142	Performed	Presenting at event	JSI	Erik Novak (JSI)	Presentation of the X5GON project	X5GON project overview (presentation)	X5GON: using AI for connecting OER sites for the collective benefit of everyone, everywhere	Creative Commons Summit 2020 (online)	Wednesday, October 21, 2020	Policy makers	20	International
143	Performed	Presenting at event, Participation to an event other than a conference, workshop, Hackathon	NA	Colin de la Higuera (NA)	AUPTIC. https://chaireunescorel.is2n.fr/2020/11/05/lia-et-les-rel-a-auptic-2020/ . https://www.youtube.com/watch?v=AbTn7pq_bKQ&feature=youtu.be	AUPTIC (Association pour l'Utilisation Pédagogique des Technologies de l'Information et de la Communication)	Invited talk	Louvain, Belgium	Friday, November 13, 2020	Scientific Community (higher education, Research)	100	International
144	Performed	Presenting at event, Participation to an event other than a conference, workshop, Hackathon	NA	Colin de la Higuera (NA)	Talk at OEGlobal 2020. https://chaireunescorel.is2n.fr/2020/08/23/x5-moodle/	X5-MOODLE	Talk at the OeGlobal conference	Taipei, Taiwan (online)	Wednesday, November 18, 2020	Scientific Community (higher education, Research)	30	International
145	Performed	Lobbying meeting	JSI	Erik Novak (JSI)	Presentation of the X5GON project to W.E.B. Du Bois Library, Massachusetts, USA	X5GON project overview (presentation)	No title	Online	Friday, December 4, 2020	Policy makers	2	International
146	Performed	Lobbying meeting	MIZS	Mojca Ilfko-Pinosa (MIZS)	Meeting with the Chairman of the Committee on Education, Science, Sport and Youth at the National Assembly of the Republic of Slovenia	X5GON project overview and the value of the X5GON for the educational system in the Republic of Slovenia	Presentation meeting for policy makers in Slovenia	Ljubljana, Slovenia	21. may 2019	Policy makers	1	National

147	Prefor med	Lobbying meeting	MIZS	Mojca Iľko-Pinosa (MIZS)	Hackathon Maribor	X5GON project overview and opportunities for further development	Presentation for participants	Maribor Slovenia	23. January 2020	Civil society	30	Local
148	Prefor med	Lobbying meeting	MIZS	Mojca Iľko-Pinosa (MIZS)	Meeting with Deputy Mayor of Maribor mrs. Helena Lukaček Kolundžija	X5GON project overview and the value of the X5GON for the Republic of Slovenia	Presentation meeting for policy makers in Slovenia	Ljubljana, Slovenia	24. January 2020	Local policy makers	1	Local
149	Perfor med	Presenting at event, Participation to an event other than a conference, workshop, Hackathon	NA	Colin de la Higuera (NA)	Hackathon	Hackathon for x5gon solutions	Hackathon - building an solutions on top of the x5gon system	Paris, France	25-27/02/2020	Scientific Community (higher education, Research)	50	International
150	Perfor med	Presenting at event, Participation to an event other than a conference, workshop, Hackathon	NA	Walid Benromdhane (NA)	Hackathon	Hackathon for x5gon solutions	Hackathon - building an solutions on top of the x5gon system	Paris, France	25-27/02/2020	Scientific Community (higher education, Research)	50	International
151	Perfor med	Presenting at event, Participation to an event other than a conference, workshop, Hackathon	NA	Victor Connes (NA)	Hackathon	Hackathon for x5gon solutions	Hackathon - building an solutions on top of the x5gon system	Paris, France	25-27/02/2020	Scientific Community (higher education, Research)	50	International
152	Prefor med	Lobbying meeting	MIZS	Mojca Iľko-Pinosa (MIZS)	Meeting with minister of environment and spatial planning Simon Zajec	X5GON project overview and the value of the X5GON for the	Presentation meeting for policy makers in Slovenia	Ljubljana, Slovenia	5. February 2020	Policy makers	2	National

						Republic of Slovenia						
153	Performed	Lobbying meeting	MIZS	Mojca Ilfko-Pinosa (MIZS)	Meeting with ministre of economic development and technology	X5GON project overview and the value of the X5GON for the Republic of Slovenia	Presentation meeting for policy makers in Slovenia	Ljubljana, Slovenia	6. February 2020	Policy makers, Policy makers	1	National
154	Performed	Hackathon	UCL	Sahan Bulathwela (UCL)	FAIR hackathon Final, Paris	X5GON API Tutorial	Hackathon - building an solutions on top of the x5gon system	Paris, France	February, 2020	Students	50	European
155	Performed	Presenting at event	UCL	Emine Yilmaz (UCL)	: Incorporating user state in task based information retrieval and recommendation of educational resources	Workshop on State-based User Modelling at WSDM 2020	Presented the TrueLearn algorithm	Houston, TX, USA	February, 2020	Scientific Community (higher education, Research), Scientific Community (higher education, Research), Scientific Community (higher education, Research)	30	Global

156	Performed	Presenting at event	UCL	Maria Perez-Ortiz (UCL)	An AI-powered learning algorithm providing inclusive, multi-modal, cross-lingual and quality lifelong learning opportunities for all	Unesco Mobile Learning Week	Presented the TrueLearn algorithm	Virtual	March, 2020	Scientific Community (higher education, Research), Industry		Global
157	Performed	Presenting at event	UCL	Maria Perez-Ortiz (UCL)	An AI-powered learning algorithm providing inclusive, multi-modal, cross-lingual and quality lifelong learning opportunities for all	Nesta - The Innovation Foundation	Presented the TrueLearn algorithm	Virtual	March, 2020	Other	5	Local
158	Performed	Presenting at event	UCL	Sahan Bulathwela (UCL)	presentation organised by Sustainable Educational Foundation	AI for social good		Virtual	June, 2020	General Public	200	Global
159	Performed	Presenting at event	UCL	Sahan Bulathwela (UCL)	presentation at journal club meeting of Web Intelligence Journal Reading Group, University College London	TrueLearn: A Family of Bayesian Algorithms to Match Lifelong Learners to Open Educational Resources		Virtual	July, 2020	Scientific Community (higher education, Research), Scientific Community (higher education, Research), Scientific Community	20	National

										(higher education, Research)		
160	Performed	Presenting at event	UCL	Sahan Bulathwela (UCL)	presentation at Explainable AI special Interest group, University College London	EXPLAINABLE X5GON: X5GON project and Explainable Artificial Intelligence		Virtual	July, 2020`	Scientific Community (higher education, Research)	20	National
161	Performed	Presenting at event	UCL	Sahan Bulathwela (UCL)	X5Learn Platform Demonstration	Open education for a better world Eduscope	Demonstration of the X5Learn platform	Virtual	July, 2020`	Scientific Community (higher education, Research), Policy makers, Scientific Community (higher education, Research), Industry	200	European

Table B1: List of FORESEEN applications for patents, trademarks, registered designs, etc.

NO.	Type of IP Rights ⁸	Application Reference ⁹		Date of the Application	Official title of the application	Applicant(s)	Has the IPR protection been awarded? ¹⁰	If available, official publication number of award of protection ¹¹
1.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

⁸ Possible options: Patent, Trademark, Registered design, Utility model, Other

⁹ Possible options: International applications of patents; National applications of patents; Other registered IPR

¹⁰ Possible options: Yes, No, Not Applicable

¹¹ Option for patents: Please insert the code (two letters referring to a country or organisation) and the serial number
Option for rest: Please insert the official publication number

Table B2: List of exploitable foreground

NO.	Type of Exploitable Foreground ¹²	Title of Exploitable Foreground	Description of exploitable foreground	Current TRL ¹³	Expected TRL ¹⁴	Is the Exploitable Foreground Confidential? ¹⁴	Exploitation Channel ¹⁵	Sector(s) of application ¹⁶	Knowledge Transfer ¹⁷	Owner & Other Beneficiary(s) involved
1	Exploitation of R&D results via standards, Exploitation of R&D results via standards	Recommendation engine and service for OER materials	This is the API that focuses on storing user activity, providing recommendations and material information to the user.	TLR5	TLR8	Yes	Developing and marketing a product/process, Joint Venture	Education	Spin-offs and entrepreneurship (Spin-offs, Start ups, Incubators at universities, Stimulating entrepreneurship), Contract research	JSI, PO
2	General advancement of knowledge	X5oerfeed, a pre-processing and open source pipeline for	Cross Modal module is extracting features and content from the material. Because OER material are	TLR8	TLR9	No	Creating and providing a service	Wikifiying, Machine Learning	Spin-offs and entrepreneurship (Spin-offs, Start ups, Incubators at universities,	JSI, PO

¹² Possible options: General advancement of knowledge; Commercial exploitation of R&D results; Exploitation of R&D results via standards; Exploitation of results through EU policies; Exploitation of results through (social) innovation

¹³ Possible options: TRL1, TRL2, TRL3, TRL4, TRL5, TRL6, TRL7, TRL8, TRL9

¹⁴ Possible options: Yes, No

¹⁵ Possible options: Developing and marketing a product/process; Spin-off; Licence; Joint Venture; Further internal research; Further collaborative research; Creating and providing a service; Standardisation activities; Assignment; Consultancy

¹⁶ Possible options: Aeronautic industries, Agriculture, Audiovisual and media, Automotive industry, Automotive industry: competition aspects, Biotechnology, Business-related services, Chemicals, Communications, Construction, Cosmetics, Culture, Defence industries, Education, Electrical engineering, Energy, Financial services, Fisheries, Fishing, Food, Food safety, Footwear, Furniture, Gas appliances, Information society sectors, Leather, Manufacturing, Maritime industries, Measuring instruments, Mechanical engineering, Media in the Single Market, Medical devices, Mining, metals and minerals, Pharmaceuticals, Pharmaceuticals & SMEs: European Medicines Agency SME Office, Pre-packed products, Pressure equipment, Radio and telecommunications terminal equipment, Raw materials, Retail services, Rural activities, Security, Services, Social economy, Space, Textiles and clothing, Tourism, Toys, Transport, Wood, paper and printing: forest-based industries, Other

¹⁷ Possible options: Scientific Publications, Other publications, including professional publications and reports, Participation in conferences and workshops, Networking (personal contacts (informal, via membership of professional organisations, via alumni organisations), Cooperation in R&D projects (Joint R&D projects, Presentation of research, Supervision of a trainee or Ph.D. student, Financing of Ph.D. research, Sponsoring of research), Contract research, Personnel mobility (Graduates, Mobility from public knowledge institutes to industry, Mobility from industry to public knowledge institutes, Mobility of people Trainees, Double appointments, Temporarily exchange of personnel), Sharing of facilities (Shared laboratories, Common use of machines, Common location or building (Science parks), Purchase of prototypes), Cooperation in education, IPR (Patent texts, Co-patenting, Licenses of university-held patents, Copyright and other forms of intellectual property), Spin-offs and entrepreneurship (Spin-offs, Start-ups, Incubators at universities, Stimulating entrepreneurship)

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		content understanding	found in different formats and types we need to handle each type separately.						Stimulating entrepreneurship)	
3	General advancement of knowledge	X5oerfeed, a pre-processing and open source pipeline for content understanding	Cross Cultural and Lingual module sends the materials after feature extraction through the wikification process, linking text to Wikipedia, thus support cross and multi-linguality enabling extraction and annotation of relevant information from OER material in different languages.	TLR8	TLR9	No	Creating and providing a service	Wikifiying, Machine Learning	Spin-offs and entrepreneurship (Spin-offs, Start ups, Incubators at universities, Stimulating entrepreneurship)	JSI
4	General advancement of knowledge	X5oerfeed, a pre-processing and open source pipeline for content understanding	Cross Domain and Site modules comprise of a few seamless processes which connect all OER content and deliver the classification of materials with a database matching verification and into the platform for delivery.	TLR8	TLR9	No	Creating and providing a service	Wikifiying, Machine Learning	Spin-offs and entrepreneurship (Spin-offs, Start ups, Incubators at universities, Stimulating entrepreneurship)	JSI
5	General advancement of knowledge	X5snippet	A generic product for each OER repository that transparently tracks user activity data, which essentially informs the platform which user accessed	TLR8	TLR9	No	Creating and providing a service	Wikifiying, Machine Learning	Spin-offs and entrepreneurship (Spin-offs, Start ups, Incubators at universities, Stimulating entrepreneurship)	JSI

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			what OER material found in a repository. The snippet activates itself and sends user activity data to the X5GON platform.							
6	General advancement of knowledge	X5analytics	The learning analytics engine that track data of users and their progress to drive an ML analytics engine improving recommendations through better understanding of users, their progress and goals, and hence their match with knowledge resources of all types.	TLR8	TLR9	No	Creating and providing a service	Wikifiying, Machine Learning	Spin-offs and entrepreneurship (Spin-offs, Start ups, Incubators at universities, Stimulating entrepreneurship)	JSI
7	General advancement of knowledge	X5recommend	The recommendation engine enabling cross-site and cross-lingual recommendation with a specific focus on automatic recognition and quality assurance of OER materials	TLR8		No	Creating and providing a service	Wikifiying, Machine Learning	Spin-offs and entrepreneurship (Spin-offs, Start ups, Incubators at universities, Stimulating entrepreneurship)	JSI
8	General advancement of knowledge	X5platform	Is made out of the X5analytics and X5recommend services packed into an API. It is designed to efficiently handle different types of OER material as well as	TLR8	TLR9	No	Creating and providing a service	Wikifiying, Machine Learning	Spin-offs and entrepreneurship (Spin-offs, Start ups, Incubators at universities, Stimulating entrepreneurship)	JSI

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			mapping material written/spoken in different languages into a common semantic space.							
9	Exploitation of results through (social) innovation, Exploitation of results through EU policies	UNESCO Recommendation on OER	This recommendation is an instrument in which “the General Conference formulates principles and norms for the international regulation of the particular question of OER and invites Member States to take whatever legislative or other steps may be required in conformity with the constitutional practice of each State and the nature of the question under consideration to apply the principles and norms aforesaid within their respective territories” (Article 1 (b)). This is therefore a norm which is not subject to ratification but which Member States are invited to apply.	TLR9	TLR9	No	Standardisation activities	International Policy	Other publications, including professional publications and reports	JSI, K4A, MIZS
10	General advancement of knowledge	X5learn	An Interactive Web Application that enables an informal	TLR7	TLR8	No	Creating and providing a service	Wikifying, Machine Learning,	Scientific Publications, Other publications, including professional	UCL

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			lifeling learner to register and carry out learning activities using the services developed by X5GON platform.					Translation, Future User Interfaces	publications and reports, Participation in conferences and workshops, Presentation of research, Supervision of a trainee or Ph.D. student, Financing of Ph.D. research, Sponsoring of research), Spin-offs and entrepreneurship (Spin-offs, Start ups, Incubators at universities, Stimulating entrepreneurship)	
11	General advancement of knowledge	X5gon-TTP	We brought into production ASR (Automatic Speech Recognition) systems for automatic transcription of OER in the dominant languages of the official pilots, namely English, Spanish, Slovene and German	TLR8	TLR9	No	Creating and providing a service	ASR, Machine Translation	Cooperation in R&D projects (Joint R&D projects, etc.)	UPV
12	General advancement of knowledge	TrueLearn Novelty Recommendation Model	A scalable, transparent, data-efficient machine learning mdoel that can infer the learner knowledge and recommend most relevant educational	TLR6	TLR8	No	Further internal research, Creating and providing a service	Wikifying, Machine Learning, Recommendations, Content Representations	Scientific Publications, Participation in conferences and workshops, Spin-offs and entrepreneurship (Spin-offs, Start ups, Incubators at universities,	UCL

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			resources with high accuracy						Stimulating entrepreneurship), Presentation of research, Supervision of a trainee or Ph.D. student, Financing of Ph.D. research, Sponsoring of research)	
13	General advancement of knowledge	X5Quality, a feature extraction engine for digital educational resources	A scalable model that can extract cross-modal quality features from a digital educational resource	TLR6	TLR8	No	Further internal research, Creating and providing a service	Text mining, Feature Extraction, Machine Learning	Scientific Publications, Other publications, including professional publications and reports, Presentation of research, Supervision of a trainee or Ph.D. student, Financing of Ph.D. research, Sponsoring of research)	UCL
14	General advancement of knowledge	X5Quality, a Machine Learning model that can predict a quality score using cross-modal features	A scalable, model for automatic evaluation of presentation quality in educational resources using the text representation of the resource.	TLR6	TLR8	No	Further internal research, Creating and providing a service	Machine Learning	Scientific Publications, Other publications, including professional publications and reports, Participation in conferences and workshops, Presentation of research, Supervision of a trainee or Ph.D. student, Financing of Ph.D. research, Sponsoring of research), Spin-offs and entrepreneurship	UCL

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NO.	Type of Exploitable Foreground ¹²	Title of Exploitable Foreground	Description of exploitable foreground	Current TRL ¹³	Expected TRL ¹⁴	Is the Exploitable Foreground Confidential? ¹⁴	Exploitation Channel ¹⁵	Sector(s) of application ¹⁶	Knowledge Transfer ¹⁷	Owner & Other Beneficiary(s) involved
									(Spin-offs, Start ups, Incubators at universities, Stimulating entrepreneurship)	