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TED4LAT

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Modelling for Latvia

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**Deliverable D5.2 – Peer-reviewed
publications. Presentations at
Conferences. Dissemination and
Exploitation Plan update. First round of
the Innovation Potential Evaluation.
Spin-off and Start-up incubation 1st
meet-up**

September 30, 2024

WP	WP5 - Dissemination and Exploitation
Task	Task T5.1: Dissemination and Exploitation Plan Task T5.2: Innovation Potential Evaluation Task T5.3: Spin-off Incubation & Business Models Task T5.4: Scientific Publications
Deliverable Leader	ViA (Vidzeme University of Applied Sciences)
Deliverable	Deliverable D5.2 – Peer-reviewed publications. Presentations at Conferences. Dissemination and Exploitation Plan update. First round of the Innovation Potential Evaluation. Spin-off and Start-up incubation 1st meet-up
Dissemination Level	Public
Action Number	101079206
Action Acronym	TED4LAT
Action title	Twinning in Environmental Data and Dynamical Systems Modelling for Latvia
Start Date of Project	01.10.2022.
Duration of Project	36 Months
Date	September 30, 2024

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HISTORY OF CHANGES			
Version	Publication date	Changes	Change editors
0.1	25.09.2024	The draft version of D5.2 was created.	Aleksandrs Gorbunovs, Ieva Vītoliņa, Ginta Majore, Kaspars Skalbergs
1.0	01.10.2024	Deliverable D5.2 is accepted by TED4LAT Partners	TED4LAT Partners
1.0	01.10.2024	Deliverable D5.2 is submitted.	Ieva Vitolina

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Executive Summary

This document is the deliverable of the TED4LAT project, funded by the European Commission under its HORIZON WIDERA-2021-ACCESS-03-01 Framework Programme.

The document is deliverable 5.2, which consists of the following sections: Peer-reviewed publications. Presentations at Conferences. Dissemination and Exploitation Plan update. First round of the Innovation Potential Evaluation. Spin-off and Start-up incubation 1st meet-up.

Peer-reviewed publications. Presentations at Conferences

Scientific Publications and Presentations at Conferences are the result of Work package WP5 – Dissemination and Exploitation Task T5.4.

The implementation time of Task T5.4 is set from 01.02.2023. till 30.09.2025.

Leader of this task is Vidzeme University of Applied Sciences (VIA), Contributors: All partners.

This task will work to ensure that the research efforts result in submission to peer-reviewed international journals and smoothly progressing. We plan to publish 10 articles in high-impact journals. Furthermore, 5 presentations (oral or poster) per year in international scientific events and conferences are also planned.

Detailed achievements could be seen and are available in the subsection 5.3.4 (plans), 5.4 (KPI), section 6 and Annex 1 (implementation/results) of the Dissemination and Exploitation Plan (the 2nd Update, ver.3).

Dissemination and Exploitation Plan, (the 2nd Update, according to the SubTask 5.1.3)

Version 3

**Added to task 5.1.3 completion report – The 2nd Update of the
Dissemination and Exploitation Plan**

WP	WP5 - Dissemination and Exploitation
Task	T5.1.3 - The 2nd Update of the Dissemination and Exploitation Plan
Task Leader	RTU
Deliverable	Could be used as an addition / update of the D5.1 – Dissemination and Exploitation Plan
Action Number	101079206
Action Acronym	TED4LAT
Action title	Twinning in Environmental Data and Dynamical Systems Modelling for Latvia
Start Date of Project	01.10.2022.
Duration of Project	36 Months
Date	September 30, 2024
Plan version	3

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HISTORY OF CHANGES			
Version	Publication date	Changes	Change editors
0.1	12.10.2022	The draft version creation was initiated.	Aleksandrs Gorbunovs, Atis Kapenieks, Ieva Vītoliņa
0.2	26.10.2022	Added: KPIs, target audience	Aleksandrs Gorbunovs, Atis Kapenieks, Ieva Vītoliņa
0.3	02.11.2022	Discussed and specified: an interrelationship of the sub-deliverables of the deliverable D5.2 - the dependence of publications on the set/achieved results	Aleksandrs Gorbunovs
0.4	23.11.2022	Added: filled-in the table with the number of contributions for the T5.4, with descriptions	Aleksandrs Gorbunovs
0.5	30.11.2022	Added following sections: Timetable, Monitoring and Evaluation	Aleksandrs Gorbunovs, Ieva Vītoliņa, Atis Kapenieks
0.6	07.12.2022	Revised KPIs table. An extra List of dissemination activities is created and linked to this file. Adjustments have been made in accordance with Partners' notes	Aleksandrs Gorbunovs, Ieva Vītoliņa, Atis Kapenieks, all Partners
1.0	08.12.2022	Version v.1 is launched	Aleksandrs Gorbunovs, Atis Kapenieks, Ieva Vītoliņa

1.2	30.09.2023	<p>The first updates to the Version v.1 are made (v.2) as follows: in subsection 5.3.4. “(T5.4) - Scientific Publications”;</p> <p>In section 6 “Timetable” (now it is section 7): changed dates of publication submissions;</p> <p>Added: the new section “Performance of outcome indicators”, describing WP5 performance indicators in brief;</p> <p>Added: the Annex 1 with the detailed information about achieved results within the 1st year period of the Project activities.</p>	Aleksandrs Gorbunovs, Vītoliņa, Kapenieks, all Partners Ieva Atis
2.0	04.10.2023	The 1 st Update of the Dissemination and Exploitation Plan (v.2) - is accepted and launched at the TED4LAT Assembly meeting.	Aleksandrs Gorbunovs, Kapenieks, Vītoliņa Atis Ieva
2.1	26.09.2024	<p>The 2nd Update of the Dissemination and Exploitation Plan (v.3) - is prepared and discussed with the Project partners at the TED4LAT workshop at RTU, Riga.</p> <p>The updates cover:</p> <p>Updated: subsection 5.3.3 (task T5.3), related to Spin-off Incubation & Business Models.</p> <p>Updated: subsection 5.3.4 (task T5.4), describing development of scientific publications;</p> <p>Specified the section 5.4 “Key Performance Indicators for Dissemination and Exploitation” and its Table 2;</p> <p>Updated the 6th section “Performance of outcome indicators”, was updated adding and precisising WP5 performance indicators achieved.</p> <p>Updated: EU logo in the 8th section;</p> <p>Supplemented and clarified: Annex 1.</p>	Aleksandrs Gorbunovs, Kapenieks, Vītoliņa, Partners Atis Ieva all
3.0	30.09.2024	The 2 nd Update of the Dissemination and Exploitation Plan (v.3) - is accepted by TED4LAT partners and launched.	Aleksandrs Gorbunovs, Kapenieks, Vītoliņa Atis Ieva



Document Information

Quality Control		
Role	Responsible Person	Approval Date
Deliverable leader	Aleksandrs Gorbunovs (RTU)	30.09.2024
Quality manager	Atis Kapenieks (RTU)	30.09.2024
Project coordinator	Ieva Vītoliņa (RTU)	30.09.2024

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Table No.1. Responsibility of Partners for the Task T5.4

Table No.2. Key Performance Indicators for Dissemination and Exploitation

Table No 3. Timeframe of the dissemination and exploitation activities

1. Executive Summary

This document is the deliverable of the TED4LAT project, funded by the European Commission under its HORIZON WIDERA-2021-ACCESS-03-01 Framework Programme. The dissemination plan is understood as a group of actions and activities for transmitting outcomes, research finding or/and products to interested target groups, users and stakeholders via specific communication channels. This document presents the D5.1 – Dissemination and Exploitation Plan 1st version deliverable, including the expected impact of the dissemination plan, ongoing and planned activities, target audience, milestones, and mechanisms to assess the dissemination and exploitation plan. Further clarifications, additions and precisions to this plan (the first and second updates) have also been made.

2. Dissemination and Exploitation Strategy and Objectives

The main goals of the dissemination and exploitation strategy are:

1. Share research results and achievements with the scientific community, commercial organizations, public bodies, policy makers, civil society.
2. Smartly identify the results to disseminate and transfer the knowledge and results to those stakeholders that can best make use of it.
3. Flexibly search, find and identify the most effective and appropriate dissemination channels.
4. Maximize the impact of research. In other words, enable the value of results to be potentially wider dissemination and exploitation target group than the original focus.
5. Constantly monitor and evaluate the effects of the dissemination activities.
6. Promote and utilize project results and achievements, ensuring their results are available for the widespread use by other European higher educational institutions.

3. Targeted community

The targeted community of the dissemination will be:

- Researchers;
- Higher educational institutions (HEI);
- Remote sensing data users in public administrations (e.g. in cadastral database; rural and coastal land, etc.);
- Enterprises (agriculture);
- Policy makers at national and local level.

4. Dissemination and Exploitation Impact

The dissemination activities are aimed to make the project results available for use, enabling their use and uptake by specific audiences, which they may use the results in their own work (e.g. scientific community, industrial or other commercial actors, policymakers, professional organizations).

Exploitation activities include actions such as utilizing the project results in further research activities other than those covered by ongoing TED4LAT project, developing, creating and marketing a product or process, creating and providing a service. The main goal of the exploitation plan is to make use of the results for societal, educational, scientific, financial, commercial or even political purposes.

The project partners are the first to exploit the project results themselves, by their own efforts or facilitate exploitation by others (e.g. through making results available under open licenses). This can take place via innovation management actions, copyright management, data management plan and stakeholder/users engagement, among others.

Common tools towards these directions in TED4LAT project will be:

1. Incubation of Spinoff and Start-up companies;
2. Publications, e.g. publications in scientific journals and conference proceedings;
3. License practices (open);
4. Use of the results for academic purposes (PhD, post-PhD);
5. Project website and partners websites;
6. Project social media accounts;
7. Promotional material (leaflets);
8. Participation in scientific events.

4.1. Main Strategic Results

Long-term impact will be sustained as far as possible by exploitation activities carried on in the 4-year period following the end of the project.

The main strategic results achieved at the end of the TED4LAT project will be as follow:

1. Strengthening research excellence in inter-institutional cooperation in Latvia,
2. Strengthening the reputation and implementation of innovations in companies, and expanding the network,
3. Increased capacity and sustainability of research institutions.

By following, here is a non-exhaustive list of means and activities envisaged to support the use of the project's results over the next 4 years after the TED4LAT initiative ends. These commitments will be refined and detailed in the final

dissemination and exploitation report D5.3 to be delivered at month 36:

- PhD programmes (as set in WP tasks) will continue, institutionally recognised and funded in the framework of an international initiative among the Latvian Universities and the leading institutions and/or other internationally reputed organisations,
- Consolidating Incubator activities of the TED4LAT topics in the broader activities of the incubator already in place at the Latvian universities. This activity will ensure that the start-up and along the themes of environmental protection, observation and modelling will be structured in the innovation processes of Latvia. Continued best practices in business incubation and business model development,
- Participating in extended research programmes at the EC level and thus consolidating the network of collaborations seeded in this CSA, Associated with document Ref. Ares(2022)5148051 - 14/07/2022 Proposal number 101079206 – TED4LAT – Part B Page 14,
- Consolidating the regular process of publications and knowledge, skills, and data sharing acquired during the project,
- Design and follow-up of exploitation roadmaps for long -term twinning with the POLITO and INRAE and enlarging twinings with other European prominent universities,
- Support for the design and development of prototypes, software,
- Taking advantage of participation in various ICT national or European events, the latest results and activities of post-TED4LAT period will be evoked by flyers, videos, demos, key-notes, etc.,
- Screening of calls for projects, and proposals writings for submission in future EC Horizon Europe 2021-2027 programme,
- Exploitation of environmental data analysis tools and dynamic systems models in two main directions:
 - climate-smart agriculture where digital twin development is the important scientific and practical application in the future. This direction provides real time data which are crucial for such types of services.
 - dynamic modeling for environmental and socio-economic challenges as cross-disciplinary research for new benefits of digital technologies.

4.2. Dissemination Measures

The following main dissemination measures will be implemented to spread the CSA outcomes:

1. Publications in internationally reputed peer-reviewed high-impact articles.
2. Participations in at least four (4) relevant Horizon Europe events in Europe

- such as the biannual event, Proposers Day, thematic calls, Brokerage events.
3. Booths at international conferences to promote the TED4LAT CSA, the possibility to participate in its workshops and provide bilateral talks to interested organisations.
 4. Illustration of CSA and its services to the Latvian and international Horizon Europe constituency in the form of a seminar at the premises of the trade event.

Participation at the EU events will offer opportunities for raising public participation and awareness. In view of increasing Latvian participation in the event the project management team together with WP5 leaders will issue a press release to relevant media contacts. Moreover, during the event the project will carry out interviews related to the ICT and the participation in the HE programmes to relevant stakeholders for involvement of further partners.

4.3. Exploitation Measures

TED4LAT Exploitation plan will be prepared at the beginning of the project. It will develop strategies and plans, including real case demonstrations among Latvia universities and practical demonstrations among SMEs. The project will deliver validation and demonstration of the TED4LAT new findings and insights for next generation research environments and the organisation of the modern doctoral school. For more extended and valued exploitation, TED4LAT plans knowledge sharing among SMEs regarding application in the contemporary data processing and modelling field. TED4LAT exploitation deployment plan will constitute a live document from the beginning of the project, and although completed at M36, it will persist after the project's completion. In particular, the Latvian partners will profit of the following outcomes:

- RTU will conduct research activities on data processing and modelling algorithms on designed application cases;
- ViA will ensure exploitation during PhD schools and among PhD study program among partners from other universities in Latvia;
- LIEPU will involve results (learning materials, research results and up-skilled early stage researchers) in study programmes, research activities and knowledge communication to general public;
- BOSC will ensure evaluation and exploitation of new data gathering methods and its application within real pilot cases.

5. Dissemination and Exploitation Deliverables, Milestones, Tasks

The main aim of this plan is to carry out all activities required to exploit the project results for the full range of potential users, including the dissemination to target audiences. This plan will ensure an implementation of tasks set in the WP5 of the TED4LAT project, appropriate deliverables and defined milestones.

5.1. Deliverables

D5.1: Dissemination and Exploitation -Plan: 1st version to be developed till the end of 31.12.2022 (Leader: RTU, Contributors: All Partners). Dissemination Level - Sensitive.- **Submitted**.

D5.2: Peer-reviewed publications. Presentations at Conferences. Dissemination and Exploitation Plan update. First round of the Innovation Potential Evaluation. Spin-off and Start-up incubation 1st meet-up (Leader: ViA, Contributors: All Partners; Dissemination level - public. M17; - 28.02.2024). **Accomplished** (also see information provided in section 6 , Annex 1, as well subsections 5.3.2, 5.3.3 and 5.3.4. of this Plan).

D5.3: – Final Report on Dissemination and Exploitation (Leader: RTU, Contributors: All Partners. Dissemination level - public. M36; - 30.09.2025)

5.2. Milestones

- **MS-18** (due date – M3; **31.12.2022**): Dissemination and exploitation plan (**1st draft**)(M3). - **Submitted**. 1st update (M12; to be submitted). 2nd update (M24).
- **MS-19** (due date – M18; **31.03.2024**): Evaluation of TED4LAT innovation potential 1st step (M18); Evaluation 2nd step (M30).
- **MS-20** (due date – M24; **30.09.2024**): Spin-off incubation & Business Models-1st meetup. The 1st meetup was held in 25-26.05.2023 at VIA, in Valmiera, Latvia.
- **MS-21** (due date – M12; **30.09.2023**): Presentations at 2 conferences. 1 publication submitted at open repositories (M12): **Presentations - done (M12), see below; Publications – done, more detailed see below in publication subsection and the 6th section “Performance of WP5 outcome indicators”**).

5.3. Tasks

5.3.1. (Task: T5.1) - Preparation of the project dissemination and exploitation plan.

It contains a detailed description of the project strategy, tools, and targets. It will be developed and updated regularly in order to include the latest developments of the research agenda and the other related project activities ensuring defined accomplishments and updates within the set deadlines corresponding to the subtasks allocated within this task (T5.1). They are as follow:

SubTask 5.1.1 - 01.10.2022 - 31.12.2022: **Development of the initial draft version of the dissemination and exploitation plan - version 1** (Leader: RTU, Contributors: All Partners) - deliverable D5.1; This is also the Milestone **MS-18** (due date – M3; **31.12.2022**) - **is done**.

SubTask 5.1.2 - 30.09.2023: **Plan update:** updated next version of the Plan (the 1st update) to be developed (Leader: RTU, Contributors: All Partners). – **M12, done**.

SubTask 5.1.3 - 30.09.2024: **Necessary adjustments and further updates of the Plan** (the 2nd update) appearing during the Project fulfilment to be reflected in the next version of the Plan (Leader: RTU, Contributors: All Partners).

These updates may come together with: publication of peer-reviewed publications, presentations at conferences, first round of the Innovation Potential Evaluation, Spin-off and Start-up incubation 1st meet-up;

SubTask 5.1.4 - 30.09.2025: **Updating and evaluating the latest developments** of the research agenda, as well as precision of the achieved results, dissemination and exploitation activities, in the form of the **final version** of the Plan (Leader: RTU, Contributors: All Partners) - deliverable D.5.3.

A non-exhaustive list of means and activities envisaged to support the use of the project's results over the next 4 years after the TED4LAT initiative ends will be detailed in the ultimate Dissemination and Exploitation Plan.

Target group: HEI, researchers, industrial organisations, remote sensing data users in public administrations (e.g. in cadastral database; rural and coastal land, etc.), enterprises (agriculture), policy makers at national and local level, public bodies.

Channels: websites, press releases together with WP1, video channels (e.g. YouTube, etc.), scientific journals, conference proceedings, presentations and posters at scientific events.

5.3.2. (T5.2) - Innovation Potential Evaluation.

(01.10.2023-31.03.2024; 01.10.2024-31.03.2025). Leader: BOSC. Contributors: All Partners.

This task aims to evaluate and explore the exploitation potential of the environmental data analysis tools and the dynamical systems models developed in WP4. The evaluation will be conducted by involving delegates from the Latvian business ecosystems. SME operating in the digital sector, in the environmental engineering sectors, or business angels, private-public partnership.

The outcomes of this task will provide the involved community with a sandbox of concepts, ideas and tools to nurture the emergence of new start-up and business models.

Expected results will be the "First round of the Innovation Potential Evaluation" - the part of deliverable D5.2 (29.02.2024) in conjunction with other results (parts of this deliverable) as follows: Peer-reviewed publications; Presentations at Conferences; Dissemination and Exploitation Plan update; and Spin-off and Start-up incubation 1st meet-up.

There is the Milestone **MS-19** (due date – M18; **31.03.2024**): Evaluation of TED4LAT innovation potential 1st step (M18);

Next rounds of the Innovation Potential Evaluation are planned on 01.10.2024-31.03.2025; Leader: BOSC, Contributors: All Partners.

Target group: HEI, researchers, industrial organisations, SME operating in the digital sector, in the environmental engineering sectors, or business angels, private-public partnership.

Channels: websites, video channels (e.g. YouTube, etc.), transferring data to Business incubators and spin-offs.

5.3.3. (T5.3) - Spin-off Incubation & Business Models

(28.02.2024-30.09.2024; 01.04.2025-30.09.2025) Leader: ViA. Contributor: BOSC.

This task aims at exploiting the innovation potential of the CSA action at the national/regional scale and hence encouraging via RTU, LIEPU and VIA Business Incubators to trigger and support spin-off and startup emerging around the themes of environmental data, dynamic modelling and e-learning. The experience of BOSC (a start-up of VIA) will serve as a model for the young innovators interested to develop ideas related to the project and transfer these ideas into businesses.

Results planned are: **three qualitative business ideas** around the themes of the project.

There is the Milestone **MS-20** (due date – M24; **30.09.2024**): Spin-off incubation & Business Models-1st meetup.

“Spin-off and Start-up incubation 1st meet-up” will be included as the part of deliverable D5.2 (28.02.2024) in conjunction with other results (parts of this deliverable) as follows: Peer-reviewed publications; Presentations at Conferences; Dissemination and Exploitation Plan update; and Spin-off and Start-up incubation 1st meet-up.

Considering that the initial meeting for the Spin-off and Start-up incubation took place during the TED4LAT workshop at VIA in Valmiera on May 25-26, 2023, subsequent meetings aimed at further developing the business ideas will be conducted during the third reporting period.

Target group: Spin-off and Start-up business incubators, young businessmen/women

Channels: meetings, workshops, websites, video channels (e.g. YouTube, etc.).

5.3.4. (T5.4) - Scientific Publications

(M4-M36) Leader: VIA Contributors: All Partners.

This is the main part of contributions to deliverable D5.2 - **Peer-reviewed publications and Presentations at Conferences** (the first publication and presentation (oral or poster) due date is **28.02.2024**), where will be added contributions from other SubTasks 5.1.2 it is expected till 30.09.2023), 5.2 and 5.3, i.e. Dissemination and Exploitation Plan update; First round of the Innovation Potential

Evaluation; and Spin-off and Start-up incubation 1st meet-up.

There is the Milestone **MS-21** (due date – M12; **30.09.2023**): Presentations at 2 conferences. 1 publication submitted at open repositories (M12); **Presentations - done (M12), see below; Publication - is planned to M17 (02.2024)**; 3 Publications submitted at open access peer-reviewed international journals & repositories (M24).

This task will work to ensure that the research efforts result in submission to peer-reviewed international journals and smoothly progressing. The planned activities:

SubTask 5.4.1 - **10 articles** to be published in high-impact journals;

SubTask 5.4.2 - **5 presentations (oral or poster) per year** in international scientific events and conferences.

Following the tasks of the Project, and its WP5 in particular, stated that the dissemination activities are aimed to make the project results available for use, enabling their use and uptake by specific audiences, which they may use the results in their own work (e.g. scientific community, industrial or other commercial actors, policymakers, professional organizations), as well as Exploitation activities ought to make use of the results for societal, educational, scientific, financial, commercial or even political purposes, it is concluded that:

- The necessary adjustments are proposed and included in WP5 Deliverable 5.1 Ver.1 the first update.
- These adjustments include the shifting the number of the dissemination and exploitation deliverables (e.g. publications) between Project duration/reporting periods.
- Hence, it allows us to reach the second part, stated in the Milestone MS18: Dissemination and exploitation plan - 1st update (M12), and the responsibility of the Project partners and updated data are presented below in the Table 1.

Table No.1.

Responsibility of Partners for the T5.4 (numbers in the table are related to SubTasks: 5.4.1 / 5.4.2).

Partners	30.09.2023	28.02.2024	30.09.2024	30.09.2025
RTU	0/3 ²	0/0	1/1	1/1
LIEPU	0/2 ¹	0/0	1/1	1/1
ViA	0/0	1/0	1/1	0/1
INRAE	0/0 ²	0/0	0/1	1/1
POLITO	2/0 ¹	0/0	0/1	1/1
BOSC*	0/0	0/0	0/0	0/0

<i>Together:</i>	2 / 5	1/0	3 / 5	4 / 5
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¹ - One presentation (conference in Foggia, Italy) was prepared in collaboration with POLITO).

² - 2 Presentations (TED4LAT Workshop in Valmiera, Latvia and at University of Latvia, in Riga, Latvia) were prepared in collaboration with POLITO).

In total: 10 publications during the entire project and 5 presentations – annually (i.e. 15 - during the entire project).

* It is foreseeable that BOSC will contribute to publications and presentations as the co-author.

An implementation of planned results of the Table No.1 is presented in the 6th section of this plan “Performance of WP5 outcome indicators”.

Moreover, the Task 5.4 may include additional publications which promote dissemination and exploitation activities (they all might be considered as the part of publications displayed in the Table 1; however, in the case that such publications are not published in high impact journals, they ought to be added in addition to the Table 1):

Codes and/or datasheets, and/or preprints on public repositories (among them - at Partners’ websites) - 3 issues, due date: 30.09.2025.

Publications (could include also publications at Partners’ websites) - 6 issues, due date: 30.09.2025;

Open access publications (could include also open access publications at Partners’ websites) - 6 issues, due date: 30.09.2025.

Target group: researchers, higher educational institutions (HEI), remote sensing data users in public administrations (e.g. in cadastral database; rural and coastal land, etc.), enterprises (agriculture), policy makers at national and local level.

Channels: Open Access journals, Conferences (in-person participation and live streams), Workshops, Websites.

European Commission dissemination and exploitation services

In order to support our dissemination and exploitation activities the TED4LAT project intends to use some of the various services complimentary offered by the *European Commission*¹:

“Open Research Europe platform: An open access, publishing platform for scientific papers for Horizon 2020 and Horizon Europe beneficiaries, including an open peer review and article revision.

Horizon Results platform: A platform for showcasing your research results, finding collaboration opportunities and getting inspired by the results of others.

Horizon Results Booster: Free consulting services including a portfolio dissemination and exploitation strategy, business plan development and go-to-market support.

European Standardisation Booster Service for EU Projects (an action supported by the European Research Area HORIZON-WIDERA-2021-ERA-01 Call, managed by REA): supports Horizon Europe and H2020 projects to contribute to standardisation in Europe and beyond.

Innovation radar: An initiative that identifies high-potential innovations, based on a data-driven methodology, and assists EU-funded researchers and innovators in reaching the market with their innovation.”

5.4. Key Performance Indicators for Dissemination and Exploitation

Table No.2.
Key Performance Indicators for Dissemination and Exploitation.

Dissemination activity	Description	KPI	Verification means	Progress till 09.2024.
Participation in conferences/ workshops (****-see notes below the table)	Participation in international and national conferences and workshops as a speaker, invited speaker, keynote, presenting TED4LAT findings and outcomes.	15 (5 x 3 year)	Attendance proofs (e.g. photos, videos, certificates, other documents, etc.)	11 (see in Annex1)
Scientific publications , (see - Table 5.1)	Peer review articles in high impact scientific journals and conference	10	Links to the published papers, screenshots from the publishers' websites, confirming impact	7

	proceedings (minimum impact factor >3.0), as well as policy briefs.		factor	
Open access publications , policy briefs (*-see notes below the table)	Publications in all possible open access dissemination channels	6	Links to the published papers, screenshots from the publishers' websites	7
Codes and preprints on public repositories	Codes and/or datasheets, and/or preprints (may include the publishing on Partners' websites)	3	Links to the published codes or preprints, screenshots from the publishers' websites	0
Incubators	Number of newcomers. Business ideas	9	The number of business ideas	0

* - Could be a part of the dissemination activity "Scientific publications"; includes also Open Access publications in high impact journals noted in the row before this activity.

Notes:

Several activities performed by other WPs also ought to be kept in mind to facilitate WP5 activities. They could include:

- Organization of project events (together with corresponding activities of WP1-4).
- Organization of PhD Schools (together with corresponding activities of WP1-4).
- Organization of long term staff exchange activities (together with corresponding activities of WP3).
- Organization of short term staff exchange activities (together with corresponding activities of WP1, 3).

- Participation in Horizon Europe events (together with corresponding activities of WP2).
- Participation in conferences/ workshops (together with corresponding activities of WP2).

6. Performance of WP5 outcome indicators

During the first and second reporting periods of the TED4LAT project its Partners have submitted for publication 9 scientific articles (7 – already published, 1 – accepted, in press, and 1 – submitted, under review) and delivered 14 scientific research reports, i.e. have performed activities and presented results as follows (in this section - in brief; more detailed information is provided in the Annex 1). An information about other scientific activities (poster sessions) is added as well:

Presentations delivered at:

- 1) 24.02.2023 – “Vidzeme Innovation Week”, Discussion Forum; non-international). Topic (in Latvian) “*Cik tālu zinātnē drīkst iesniegties improvizācija?*” (in English: “How far can improvisation go in science?”) held in Priekule, Latvia. Presentation title, in Latvian: “*Eko-kiber-fizisku sistēmu digitālais dvīnis: Inovācija vai improvizācija?*” (in English: “The digital twin of eco-cyber-physical systems: Innovation or improvisation?”). Presented by Vidzeme University of Applied Sciences.
- 2) 24.-26.05.2023. – TED4LAT Workshop, held at Vidzeme University of Applied Sciences, in Valmiera, Latvia. Presentation title: “Wellbeing Monitoring: Environmental Data and Dynamics System Modelling”. Presented by Riga Technical University in close collaboration with INRAE.
- 3) 26.05.2023 – A high-level expert conference in Latvian: “Izglītības digitalizācija: jauni risinājumi transformācijai” (in English: “Digitalization of education: new solutions for transformation in action”, organized by Association “Latvijas Formula 2050”, held in Riga, Latvia. Presentation title, in Latvian: “Digitālā laikmeta izglītība – kādu to redzam? Izglītības tehnoloģiju attīstības izaicinājumi un iespējas ceļā uz Digitālo laikmetu” (in English: “Digital age education - what do we see it as? Challenges and opportunities of educational technology development on the way to the Digital Age”). Presented by Riga Technical University.
- 4) 01.06.2023 – The 81st International Scientific Conference of the University of Latvia; Topic: “Geodynamics and Geospatial Research 2023”; Section “Towards Wellbeing Concept Based on Environmental Data, Geospatial Data and Dynamic modelling”. Presentation title: “Towards Wellbeing Concept Based on Environmental Data, Geospatial Data and Dynamic modelling”. Presented by Riga Technical University in close collaboration with INRAE.
- 5) 02.06.2023 – The 7th Annual International Conference on Innovations and Creativity (ICIC 2023) “Where Math, Art, and Technology meet”, held in Liepāja, Latvia. Presentation title: “Digital Learning Platforms: Advancements and Effectiveness in Education”. Presented by Liepāja University, Latvia.



- 6) 02.06.2023 – The 7th Annual International Conference on Innovations and Creativity (ICIC 2023) “Where Math, Art, and Technology meet”, held in Liepaja, Latvia. Presentation title: “ Digital Technology Solutions for Future Education in Action”. Presented by Riga Technical University, Latvia.
- 7) 13.-15.09.2023 – “The 5th International Conference on Higher Education Learning Methodologies and Technologies”, Online University of Foggia, Italy. Presentation title: " Digital Twins and E-Learning: Challenges and Opportunities". Presented by Liepaja University, Latvia, in close collaboration with Politecnico di Torino, Italy.

After the above conference in University of Foggia the authors of the presentation are working on preparation of an article to be published in Dec2023- Feb2024.

Within the 2nd reporting period:

- 8) 05.04.2024 – The 82nd International Scientific Conference of the University of Latvia; Section: "Ģeomātika: tālizpēte un ĢIS (in English: Geomatics: Remote Sensing and Geographic information systems"; Presentation title: “Vai laimi mēra bagātība? (in English: Is happiness measured in wealth?“, presented by RTU (authors: Una Krutova and Ieva Vitolina);
- 9) 27-29.04.2024 – “The 8th International Conference on Energy Economics and Energy Policy (ICEEEP 2024)”, Lille, France. Presentation title: “State of decision making in the Baltic States: Nuclear Energy past and for the future”. Presented by Riga Technical University (Guna Jakobsons-Snepste) in collaboration with INRAE.
- 10) 06.-07.06.2024 – The 12th International Conference “Education, Reflection, Development (ERD-2024)” held at Cluj-Napoca, Romania. Presentation title “E-Twin Concept in E-Learning Management System”, presented by LiePU (Dzintars Jankovskis, Ieva Cirule and Lasma Ulmane-Ozolins).
- 11) 27.-28.06.2024 – The 15th Int.Scientific and Practical Conference “Environment. Technology. Resources” held at National Military University in Veliko Tarnovo, Bulgaria. Presentation title “Environmental Data and Digital Twins for Road Traffic Safety in Rural Areas”, presented by ViA (Authors: Roberts Volkovičs, Viesturs Bambāns, Ginta Majore).
- 12) 02.-13.09.2024 – Doctoral school / BEHAVE Summer School “Agent-Based Modelling 2024”, Organized by University of Milan, Department of Social and Political Science, held at University of Brescia, Brescia, Italy. Presentation title “Shift in Attitudes Toward Nuclear Energy in the European Union”, presented by RTU (Guna Jakobsons-Snepste).
- 13) 13.09.2024 (online) – Doctoral school / BEHAVE Summer School “Agent-Based Modelling 2024”, Organized by University of Milan, Department of Social and Political Science, held at University of Brescia, Brescia, Italy. Presentation title “Human-Environmental Interactions and Well-being Modelling”, presented by RTU (Ieva Vitolina), online (ZOOM).
- 14) 18-20.09.2024 – International Workshop on: Technology, Employment, Change Management and Human Well-Being (TECH), The Angevin-Aragonese Castle Gaeta, Italy. The workshop is sponsored and organized by the Creativity and Motivations Economic Research Center (CreaM) at the University of Cassino and Southern Lazio. Presentation title “Well-being after "Newton and the Age of Enlightenment"”, presented by RTU (Una Krutova).

Poster(s) at conference poster sessions:

- 1) 27.-29.06.2023 – “World Congress of Latvian Scientists”, held in Riga, Latvia. Deliverable - the TED4LAT project poster at the conference poster sessions, presented by Riga Technical University and Liepaja University.
- 2) 16-18.11.2023 - DASC2023 International Workshop “Challenges in Data Science: a Complex Systems Perspective”, held at Politecnico di Torino, Italy.

The DASC2023 (6th International Workshop on Complex System Science) & TED4LAT (1st PhD School) aim at the exploration of the multiple methodological intersections devised in diverse application areas of current interest.

Lectures held by internationally reputed scholars on November 16th-18th to provide a broad overview and deep insights in Data Science & Complex Systems Science.

Presentations & Posters delivered by PhD students and young researchers in the main hall of the Politecnico di Torino on the November 17th, 2023.

More info: <https://dasc.polito.it>

Moreover, publications related to/describing TED4LAT project aims and ongoing activities are presented on the Partner organizations' websites on a regular basis.

Publications:

- 1) **Title:** Quantifying population dynamics via a geometric mean predator–prey model.

Authors: Sergio L. da Silva, Anna Carbone, Giorgio Kaniadakis (Politecnico di Torino).

Journal: Chaos 33, 083102 (August 03, 2023). <https://doi.org/10.1063/5.0158723>

Citation: S. L. da Silva, A. Carbone, G. Kaniadakis; Quantifying population dynamics via a geometric mean predator–prey model. Chaos 1 August 2023; 33 (8): 083102.

- 2) **Title:** Capturing urban scaling laws via spatio-temporal correlated clustering.

Authors: Anna Carbone, Sergio L. da Silva, Giorgio Kaniadakis (Politecnico di Torino).

Publisher: Routledge (eBook ISBN 9781003288312: <https://www.taylorfrancis.com/books/edit/10.4324/9781003288312/urban-scaling-luca-acci>).

Citation: Anna Carbone, Sergio L. da Silva, Giorgio Kaniadakis (2024). Capturing urban scaling laws via spatio-temporal correlated clustering. In: *Book Chapter (Part IV): D'Acci, L.S. (Ed.). (2024). Urban Scaling: Allometry in Urban Studies and Spatial Science (1st ed.).* Routledge. <https://doi.org/10.4324/9781003288312>

3) **Title:** Complex transitions of the bounded confidence model from an odd number of clusters to the next.

Author: Guillaume Deffuant (INRAE).

Journal: Physics 2024, 6(2), 742-759; <https://doi.org/10.3390/physics6020046>

4) **Title:** Environmental Data and Digital Twins for Road Traffic Safety in Rural Areas.

Authors: Roberts Volkovičs, Viesturs Bambāns, Ginta Majore,

Publisher: Proceedings of the 15th Int.Scientific and Practical Conference "Environment. Technology. Resources" (accepted; published).

Citation: Roberts Volkovičs, Viesturs Bambāns, Ginta Majore (2024). Environmental Data and Digital Twins for Road Traffic Safety in Rural Areas. In: *Proceedings of the 15th Int.Scientific and Practical Conference "Environment. Technology. Resources"*, Veliko Tarnovo, Bulgaria, 27-28.06.2024, pp. Volume II, pp. 317-323.

5) **Title:** State of decision making in the Baltic States: Nuclear Energy Past and for the Future.

Authors: Guna Jakobsons-Snepste, Guillaume Deffuant, Ieva Vitolina, Janis (sn.) Kapenieks, V.Vitolins.

Publisher: Springer Cham; Special Chapter of the 8th Int.Conf. on Energy Economics and Energy Policy (ICEEEP 2024)" Proceedings in Springer Book Series-Green Energy and Technology.

Citation: Guna Jakobsons-Snepste, Guillaume Deffuant, Ieva Vitolina, Janis (sn.) Kapenieks, V.Vitolins (2024). State of Decision-Making in the Baltic States: Nuclear Energy Past and for the Future. In: Chen, L. (eds) Trends in Clean Energy Research. Green Energy and Technology, pp139-149, Springer, Cham. https://doi.org/10.1007/978-3-031-67987-2_14

6) **Title:** Digital Twins and E-Learning: Navigating Challenges and Opportunities.

Authors: Dzintars Jankovskis (corresponding author; young researcher), Iveta Cirule (both from LiepU), Anna Carbone (Politecnico di Torino)

Published in: Springer Cham. Part of the book series: Communications in Computer and Information Science (CCIS, volume 2076).

Citation: Jankovskis, D., Cirule, I., Carbone, A. (2024). Digital Twins and E-Learning:

Navigating Challenges and Opportunities. In: Casalino, G., et al. Higher Education Learning Methodologies and Technologies Online. HELMeTO 2023. Communications in Computer and Information Science, vol 2076, pp. 169-179. Springer, Cham. https://doi.org/10.1007/978-3-031-67351-1_12

7) **Title:** Time series forecasting of price of the agricultural products using data science.

Authors: Tetiana Kmytiuk (Kyiv National Economic University), Ginta Majore (VIA), Tetiana Bilyk (Kyiv National Economic University).

Published in: International Scientific E-Journal “Agricultural and Resource Economics”.

Citation: Kmytiuk, T., Majore, G., Bilyk, T. (2024). Time series forecasting of price of the agricultural products using data science. International Scientific E-Journal “Agricultural and Resource Economics”, Vol. 10, No. 3, pp. 5-33, published: 20.09.2024, doi: <https://doi.org/10.51599/are.2024.10.03>

8) **Title:** Exploring Knowledge Acquisition Dynamics in Small Student Groups: A Case Study

Authors: Iveta Daugule, Atis Kapenieks.

Publisher: Springer (in Press)

Accepted for the publication as a book chapter in the book “Emerging Technologies in Learning”; manuscript ID: 144 (expected publication date: till the end of 2024).

9) **Title:** Human - Environment interactions and well-being monitoring: a Systematic Review.

Authors: Ieva Vitolina, Jean-Denis Mathias; Una Krutova; Aleksandrs Gorbunovs; Atis Kapenieks; Janis Kapenieks Sen; Janis Kapenieks Jun; Guna Jakobsone-Snepste.

Journal: Wellbeing, Space & Society (*under review*; submitted in June 2024; Manuscript Number: WSS-D-24-00044).

7. Timetable

Table No 3 below depicts the timeframe of the several dissemination and exploitation activities foreseen by the project. This table is intended for self-monitoring of Partners' activities.

Table No 3.
Timeframe of the dissemination and exploitation activities.

Task	Related Work Packages (WP), milestones, deliverables, KPI	2022	2023				2024				2025		
		4	1	2	3	4	1	2	3	4	1	2	3
Task T5.1: Dissemination and Exploitation Plan and updates, Leader: RTU, Contributors: All		x			x				x			x	
	Milestone. Dissemination and exploitation plan (1st WP5 draft). 1st update (M12). 2nd update M24	x			x				x				
	Deliverable D5.1 – Dissemination and Exploitation Plan: 1st version	x											
	Deliverable D5.3 – Final Report on Dissemination and Exploitation												x
Task T5.2: Innovation Potential Evaluation, Leader: BOSC, Contributors: All						x	x			x	x		
	Milestone. Evaluation of TED4LAT innovation potential 1st step (M18); Evaluation 2nd step (M30)						x				x		
Task T5.3: Spin-off								x	x			x	x

and grant agreement number of the project, as required in the Grant Agreement as well as:

“Any communication or dissemination activity related to the action must use factually accurate information. Moreover, it must indicate the following disclaimer (translated into local languages where appropriate):

“Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or EUROPEAN RESEARCH EXECUTIVE AGENCY. Neither the European Union nor EUROPEAN RESEARCH EXECUTIVE AGENCY can be held responsible for them.””

All project documents and materials must have the following logo:



**Funded by
the European Union**

Each project partner should immediately contact RTU if they identify problems or risks arising while planning or implementing dissemination or exploitation actions.

9. References

1. https://rea.ec.europa.eu/horizon-europe-dissemination-and-exploitation_en

10. Annex 1: “Dissemination and Exploitation Outcomes: the 1st Year Reporting Period Results”

Participation in conferences and other scientific events with delivering presentations or/and posters:

24.02.2023 – “Vidzeme Innovation Week”

Discussion Forum, held in Priekule, Latvia.

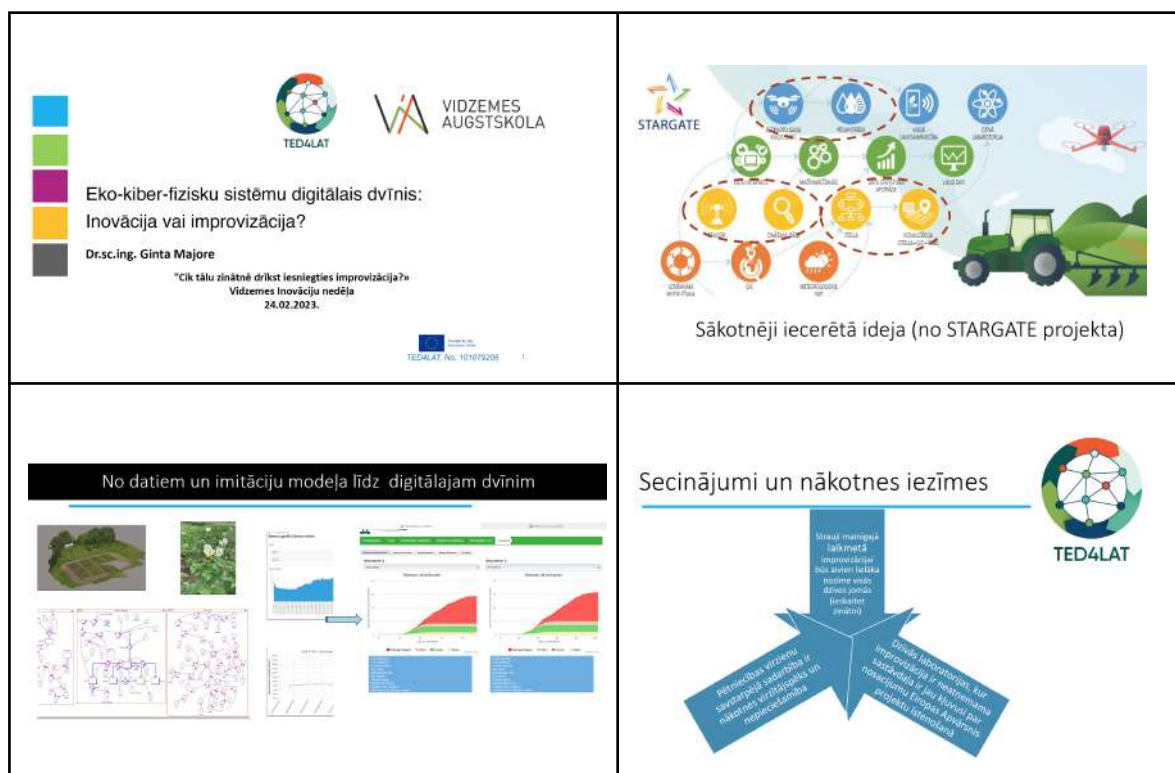
Topic (in Latvian) “*Cik tālu zinātnē drīkst iesniegties improvizācija?*”

(in English: “**How far can improvisation go in science?**”)



Presentation title, in Latvian: “*Eko-kiber-fizisku sistēmu digitālais dvīnis: Inovācija vai improvizācija?*” (in English: “**The digital twin of eco-cyber-physical systems: Innovation or improvisation?**”). Presented by Dr.sc.ing. Ginta Majore, Vidzeme University of Applied Sciences.

Presentation examples:

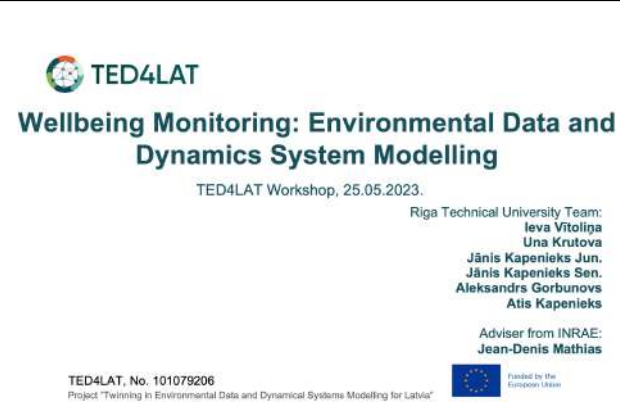


24.-26.05.2023. – TED4LAT Workshop,

held at Vidzeme University of Applied Sciences, in Valmiera, Latvia.

Presentation title: **“Wellbeing Monitoring: Environmental Data and Dynamics System Modelling”**. Presented by Riga Technical University & INRAE.

Presentation examples:

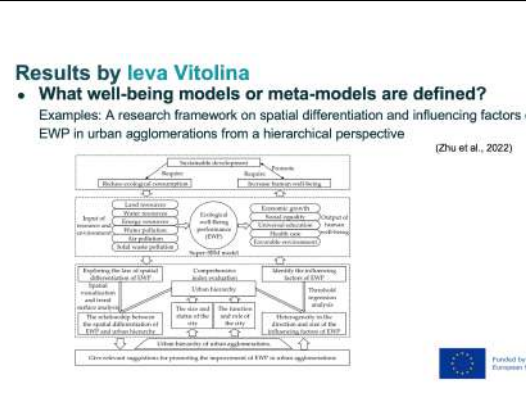


TED4LAT
Wellbeing Monitoring: Environmental Data and Dynamics System Modelling
TED4LAT Workshop, 25.05.2023.
Riga Technical University Team:
Ieva Vitoliņa
Una Krutova
Jānis Kapenieks Jun.
Jānis Kapenieks Sen.
Aleksandrs Gorbunovs
Atis Kapenieks
Adviser from INRAE:
Jean-Denis Mathias
TED4LAT, No. 101079206
Project "Twinning in Environmental Data and Dynamical Systems Modelling for Latvia"
Funded by the European Union

Results by Ieva Vitoliņa

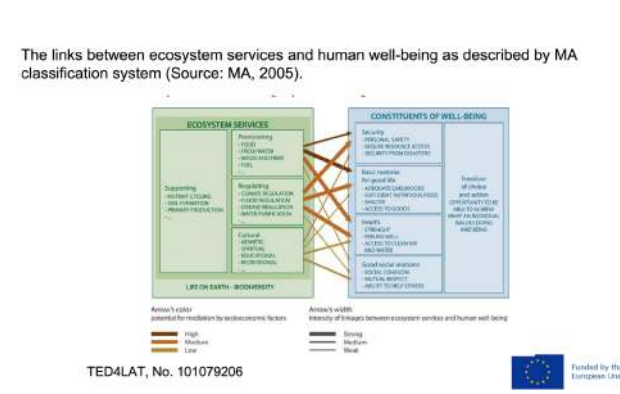
- What well-being models or meta-models are defined?

Examples: A research framework on spatial differentiation and influencing factors of EWP in urban agglomerations from a hierarchical perspective (Zhu et al., 2022)



Funded by the European Union

The links between ecosystem services and human well-being as described by MA classification system (Source: MA, 2005).




TED4LAT, No. 101079206
Funded by the European Union

Results by Aleksandrs Gorbunovs (cont.2)

Framework for examining interactions between sustainable development goals

(cf.: Wang, J., Yang, C., Bell, S., et al. Governing the UN Sustainable Development Goals: Information, Infrastructure, and Institutions. *Learn Glob Health* 2015; 1: 201–225).

- What is missed in this Figure (in Wellbeing domain):
Nations, race equality



TED4LAT, No. 101079206
Funded by the European Union

26.05.2023 – A high-level expert conference, in Latvian: **“Izglītības digitalizācija: jauni risinājumi transformācijā”** (in English: **“Digitalization of education: new solutions for transformation in action”**), organized by Association “Latvijas Formula 2050”, held in Riga, Latvia.

Presentation title, in Latvian: **“Digitālā laikmeta izglītība – kādu to redzam? Izglītības tehnoloģiju attīstības izaicinājumi un iespējas ceļā uz Digitālo laikmetu”**

(in English: **“Digital age education - what do we see it as? Challenges and opportunities of educational technology development on the way to the Digital Age”**). Presented by Riga Technical University.

Press-release:

<https://lvportals.lv/dienaskartiba/352173-eksperti-ikt-nozare-jaklusi-ari-par-atbalstu-izglitiba-nozares-reformam-2023>

Video: https://youtube.com/live/NuNczKM_wUA?feature=share

Conference images:



Presentation examples:



TED4LAT

Digitālā laikmeta izglītība – kādu to redzam?

**Izglītības tehnoloģiju attīstības izaicinājumi un iespējas ceļā
uz Digitālo laiku**

Atis Kapenieks, Dr.Phys

26.05.2023

TED4LAT, No. 101079206

Project "Twinning in Environmental Data and Dynamical Systems Modelling for Latvia"

RTU
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UN HUMANITĀRO
ZINĀTŅU FAKULTĀTE

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European Union

01.06.2023 – The 81st International Scientific Conference of the University of Latvia;

Topic: "Geodynamics and Geospatial Research 2023";

Scientific Section: "Towards Wellbeing Concept Based on Environmental Data, Geospatial Data and Dynamic modelling".

Held at University of Latvia, in Riga, Latvia.

Presentation title: "Towards Wellbeing Concept Based on Environmental Data, Geospatial Data and Dynamic modelling". Presented by Riga Technical University.

Presentation examples:

02.06.2023 – The 7th Annual International Conference on Innovations and Creativity (ICIC 2023) “Where Math, Art, and Technology meet”,

Held in Liepaja, Latvia

Presentation title: **“ Digital Technology Solutions for Future Education in Action”.**

Presented by Riga Technical University, Latvia

Presentation examples:



TED4LAT



Funded by the European Union

Digital Technology Solutions for Future Education in Action

7TH INTERNATIONAL CONFERENCE ON INNOVATIONS AND CREATIVITY

Where Math, Art, and Technology meet

Atis Kapenieks, Dr.Phys.

Liepaja University 2.06.2023

<https://www.ted4lat.eu/>

This research has been funded by the European Union. Project "Twinning in Environmental Data and Dynamical Systems Modelling for Latvia". TED4LAT, No. 101079206. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.



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13.-15.09.2023 – “The 5th International Conference on Higher Education Learning Methodologies and Technologies”,

Online University of Foggia, Italy.

Presentation title: **"Digital Twins and E-Learning: Challenges and Opportunities"**. Presented by Liepaja University, Latvia, and Politecnico di Torino, Italy.

After noted above conference in University of Foggia the authors of the presentation are working on preparation of an article to be published in winter months 2024.

Presentation examples:

Digital Twins and E-Learning: Challenges and Opportunities


Authors:
 Dzintars Jankovskis (Liepaja University, Liepaja, Latvia)
 Iveta Cirule (Liepaja University, Liepaja, Latvia; BIORGANIKS Ltd, Riga, Latvia)
 Anna Carbone (Politecnico di Torino, Turin 10129, Italy)

5th International Conference on Higher Education Learning Methodologies and Technologies Online University of Foggia, September 13-15, 2023

<https://www.ted4lat.eu/>

This research has been funded by the European Union. Project "Twinning in Environmental Data and Dynamical Systems Modeling for Latvia". TED4LAT, No. 101079206. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.

TED4LAT, No. 101079206



Digital Twin

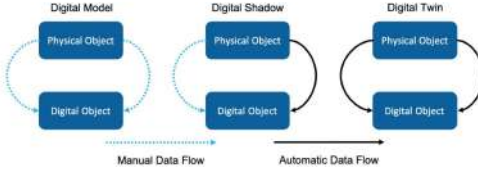



Fig. 4. Digital Model, Shadow and Twin (Fuker et al., 2020)


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Novelty Of The Research

- > Digital Twin concept can be applied to a digital object
- > Digital Twin phenomenon can be taught but a well-defined protocol (framework) of a "DT-learning" has to be developed

TED4LAT, No. 101079206



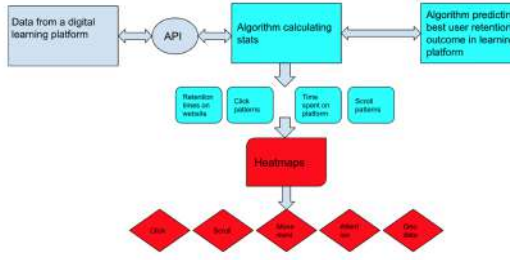



Fig. 11. Virtual AI Twin architecture in e-learning - version 1, created by Authors based on the literature review

TED4LAT, No. 101079206

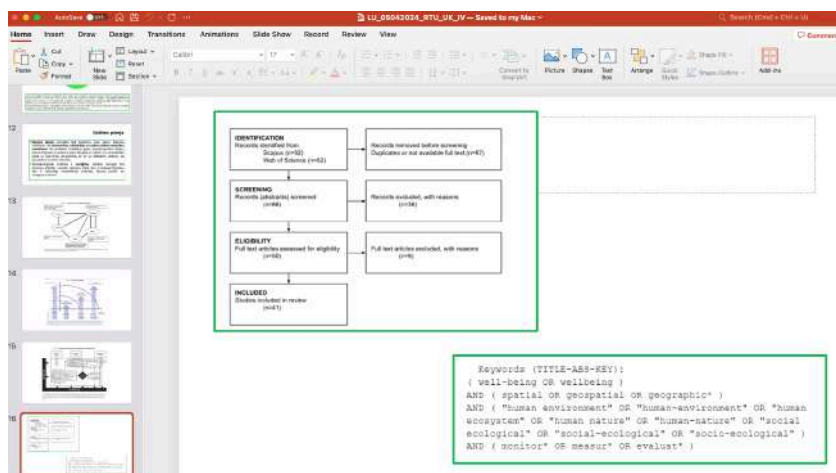


13.-15.09.2023 – “The 82nd International Scientific Conference of the University of Latvia; Section: "Geomātika: tālzpēte un ĢIS (in English: Geomatics: Remote Sensing and Geographic information systems)",

University of Latvia, Riga, Latvia.

Presentation title: **“Vai laimi mēra bagātībā? (in English: Is happiness measured in wealth?”**. Presented by RTU, Latvia.

Presentation examples:

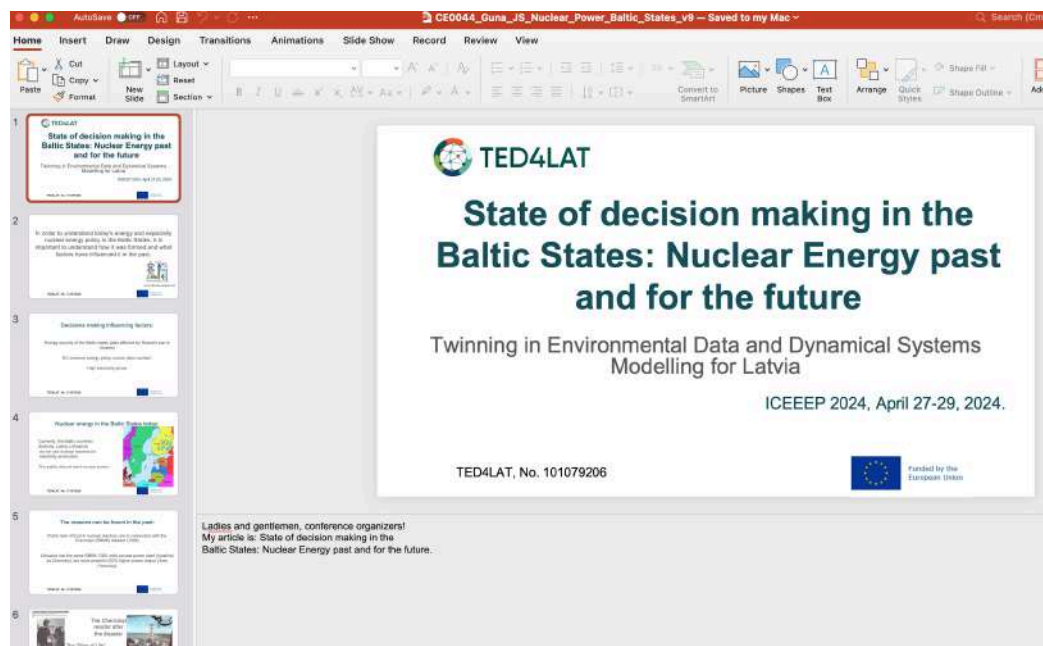


27-29.04.2024 – “The 8th International Conference on Energy Economics and Energy Policy (ICEEEP 2024)”

Lille, France.

Presentation title: **“State of decision making in the Baltic States: Nuclear Energy past and for the future”**. Presented by RTU (Latvia) in collaboration with INRAE (France).

Presentation examples:



**27.-28.06.2024 – “The 15th Int.Scientific and Practical Conference
“Environment. Technology. Resources (ETR)”**,

National Military University, Veliko Tarnovo, Bulgaria.

Presentation title: **“Environmental Data and Digital Twins for Road Traffic Safety in Rural Areas”**. Presented by VIA (Latvia).

Presentation examples:



 **Funded by the European Union**

Environment. Technology. Resources.
15th International Scientific and Practical Conference. June 27-28, 2024, "Vasil Levski"
National Military University, Veliko Tarnovo, Bulgaria

 **TED4LAT**

ENVIRONMENTAL DATA AND DIGITAL TWINS FOR ROAD TRAFFIC SAFETY IN RURAL AREAS

ROBERTS VOLKOVICŠ MODELLING OF SOCIOTECHNICAL SYSTEMS. VIDZEME UNIVERSITY OF APPLIED SCIENCES VALMIERA, LATVIA ROBERTS.VOLKOVICS@VA.LV	VIESTURS BAMBĀNS MODELLING OF SOCIOTECHNICAL SYSTEMS. VIDZEME UNIVERSITY OF APPLIED SCIENCES VALMIERA, LATVIA VIESTURS.BAMBANS@VA.LV	DR.SC.ING. GINTA MAJORE MODELLING OF SOCIOTECHNICAL SYSTEMS. VIDZEME UNIVERSITY OF APPLIED SCIENCES VALMIERA, LATVIA GINTA.MAJORE@VA.LV
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This research has been funded by the European Union. Project "Twinning in Environmental Data and Dynamical Systems Modelling for Latvia". TED4LAT, No. 101079206. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.

27/06/2024

02.-13.09.2024 – “BEHAVE Summer school / Doctoral school “Agent-Based Modelling 2024”

Organized: by University of Milan, Department of Social and Political Science,

Held: at University of Brescia, Brescia, Italy.

Presentation title: **“Shift in Attitudes Toward Nuclear Energy in the European Union “**. Presented by RTU (Latvia).

Presentation examples:

Shift in Attitudes Toward Nuclear Energy in the European Union

*H2020 project «Twinning in Environmental Data and Dynamical Systems
Modelling for Latvia»*

BEHAVE Summer School 2024 on «Agent-Based Modeling for Social Scientists»,
September 2-6, 2024.
Researcher, Guna Jakobsone-Snepste

TED4LAT, No. 101079206



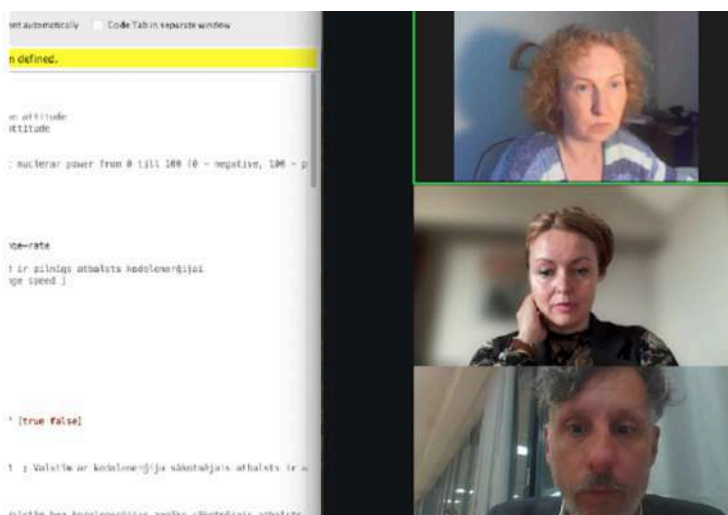
13.09.2024 – “BEHAVE Summer school / Doctoral school on Agent Based Modelling 2024”,

Organized: by University of Milan, Department of Social and Political Science

Presented: Online (ZOOM).

Presentation title: **“Human-Environmental Interactions and Well-being Modelling”**. Presented by RTU (Latvia).

Presentation examples:



18-20.09.2024 – International Workshop on: Technology, Employment, Change Management and Human Well-Being (TECH)

organized by the Creativity and Motivations Economic Research Center (CreaM) at the University of Cassino and Southern Lazio.

Presentation title: **“Well-being after "Newton and the Age of Enlightenment"”**. Presented by RTU (Latvia).

Presentation examples:

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The emphasis is on an anthropocentric view of well-being, focused on how to obtain human well-being in dominant in society and science, however, interest in planetary well-being has been growing in recent years.

Human well-being, which is still the focus of scientific research, should be looked at through the prism of planetary well-being. Human well-being is part of planetary well-being. Planetary well-being should be viewed as a complex system that consists of several socio-ecological systems (SES). Planetary well-being can be seen as the appropriate well-being of multiple SES at different scales (local, regional, global). The sustainability of planetary well-being depends on the functioning and resilience of these interconnected SES.

Human and environmental well-being are mutually influencing. In order for the restoration and human cooperation to be sustainable, from the point of view of complex systems, it is critical to provide needs, solutions for the system processes.

Understanding these relationships and strengthening the level of basic needs is crucial for developing strategies to provide sustainability and resilience across human and natural development under various planetary well-being.

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RĪGAS TEHNISKĀ UNIVERSITĀTE

Well-being after "Newton and the Age of Enlightenment"

Una Krutova, Ieva Vitoliņa, Marina Čerpinska, Anita Jansone, Jānis Kaminskis. [Riga Technical University](#).

International Workshop on: Technology, Employment, Change Management and Human Well-Being (TECH)

[The Angevin-Aragonese Castle Gaeta \(Italy\)](#)

September 18-20, 2024

Project "Twinning in Environmental Data and Dynamical Systems Modelling for Latvia". TED4LAT, No. 101079206.

TED4LAT

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Poster(s) at conference poster sessions:

27.-29.06.2023 – “World Congress of Latvian Scientists”,

held in Riga, Latvia. Deliverable - the **TED4LAT project poster at the conference poster sessions**, presented by Riga Technical University and Liepaja University.

Some images from the poster session:

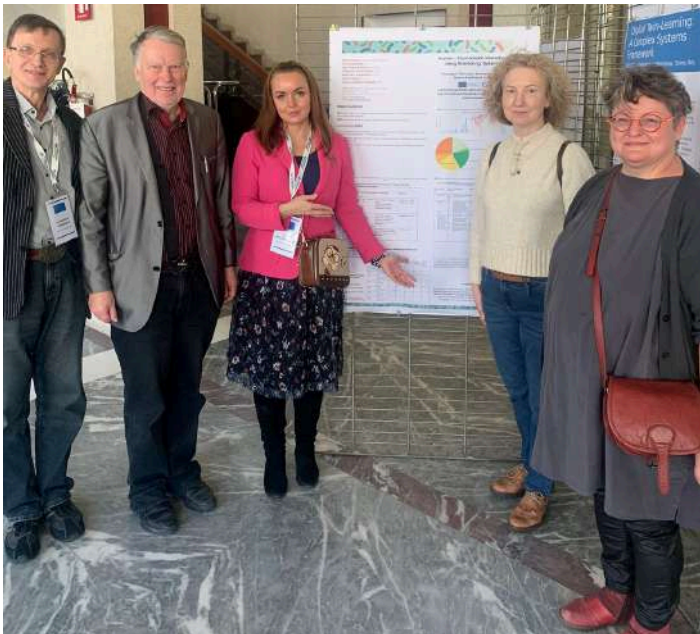


16-18.11.2023 – “DASC2023 International Workshop “Challenges in Data Science: a Complex Systems Perspective”,

Politecnico di Torino, Italy.

Presentations delivered at TED4LAT workshop and Doctoral School, and Posters exhibited by PhD students and young researchers in the main hall on November 17th, 2023. More info: <https://dasc.polito.it>

Some examples:



Moreover, publications related to/describing TED4LAT project aims and ongoing activities are presented on the Partner organizations' websites on a regular basis.

First round of the Innovation Potential Evaluation

First round of the Innovation Potential Evaluation is the result of the Task T5.2: “Innovation Potential Evaluation” that has the timeframe: 10.2023-03.2024 and 10.2024-03.2025. Leader: BOSC. Contributors: All Partners.

This task aims to evaluate and explore the exploitation potential of the environmental data analysis tools and the dynamical systems models developed in WP4: Common research agenda and shared laboratory set-up. The evaluation will be conducted by involving delegates from the Latvian business ecosystems. SME operating in the digital sector, in the environmental engineering sectors, or business angels, private-public partnership. The outcomes of this task will provide the involved community with a sandbox of concepts, ideas and tools to nurture the emergence of new start-up and business models.

Considering that the initial meeting for the Innovation Potential Evaluation, as well as Spin-off and Start-up incubation already took place during the TED4LAT project workshop at VIA in Valmiera on May 25-26, 2023, subsequent meetings aimed at further developing the business ideas will be conducted during the last year reporting period of this project.

Spin-off Incubation & Business Models

Spin-off Incubation & Business Models is the result of the Task T5.3 “Spin-off Incubation & Business Models” that has the timeframe 28.02.2024-30.09.2024; 01.04.2025-30.09.2025. Leader: VIA. Contributors: BOSC

This task aims at exploiting the innovation potential of the CSA action at the national/regional scale and hence encouraging via RTU, LIEPU and VIA Business Incubators to trigger and support spin-off and startup emerging around the themes of environmental data, dynamic modelling and e-learning. The experience of BOSC (a start-up of VIA) will serve as a model for the young innovators interested to develop ideas related to the project and transfer these ideas into businesses. Results planned are three qualitative business ideas around the themes of the project.

Taking into account that Spin-off Incubation & Business Models first meet up was held in Valmiera on May 25-26, 2023, further meetings and workshops will be served for development of appropriate business ideas which would be included as the part of final exploitation plan of this project. Next Spin-off Incubation & Business Models development meeting is planned to be held on 18th October 2024.