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Jean Monnet Centre of Excellence

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Technology and Innovations for Agenda 2030
– EU Global Leadership –
TIA 2030

Teaching materials "Theories of Information Society", "Projects of Information Technologies", "New Paradigms of Information Society"

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Definitions

The following table represents the abbreviations used in this document.

Term/Abbreviation	Definition
EU	European Union
WP	Work Package
SO	Specific objective
SDG	Sustainable Development Goal

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Executive Summary

Deliverable D2.1 presents the teaching materials developed for three courses within the Jean Monnet Centre of Excellence "Technology and Innovations for Agenda 2030 – EU Global Leadership" (TIA2030): "Theories of Information Society" at bachelor's level, "Projects of Information Technologies" at master's level, and "New Paradigms of Information Society" at doctoral level.

Implemented under Tasks T2.1-T2.3 (under WP2 – Teaching on the EU and Agenda 2030) , the courses incorporated EU policies, Agenda 2030 and its Sustainable Development Goals into existing teaching on the information society, information technology projects and technological and social change. They were delivered across three academic years 2023/2024, 2024/2025 and 2025/2026.

The principal output is a collection of teaching materials supporting interdisciplinary learning, independent analysis and further study in EU-related subjects. The complete teaching material collection, as well as the presentation of the TIA2030 and its objectives, is attached to this deliverable as separate files. It will be published on the TIA2030 online platform, supporting continued use and adaptation by educators and other interested actors within and beyond the European Union.

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1. Introduction

Jean Monnet Centre of Excellence "Technology and Innovations for Agenda 2030 – EU Global Leadership" (TIA2030) connects research on the European Union's implementation of Agenda 2030 with teaching and knowledge exchange. In this context, WP2 – *Teaching on the EU and Agenda 2030* connects TIA2030's research with teaching for students who may otherwise have limited exposure to EU studies. Its purpose is to introduce relevant European policy questions into students' existing fields of study and professional preparation.

Deliverable D2.1 covers the teaching activities associated with the three degree-level courses under Tasks T2.1-T2.3: "Theories of Information Society" at bachelor's level, "Projects of Information Technologies" at master's level, and "New Paradigms of Information Society" at doctoral level. The teaching materials address EU policy challenges, support learners in approaching interdisciplinary problems and develop their understanding of analytical approaches in EU studies.

Within the project's structure, WP3 provides the research dimension informing WP2, WP5 supports evaluation, and WP4 provides communication and dissemination. This relationship places the course materials within a wider programme of research, teaching and public exchange concerning technological innovation and the implementation of Agenda 2030.

The document is structured into 4 chapters. Chapter 1 provides introductory remarks and outlines the purpose and scope of the deliverable. Chapter 2 details implementation details of the three courses. Chapter 3 presents teaching materials and the educational approach as well as the identification of further study and research opportunities on this basis relevant for the wider academic community for respective courses, underlining the contribution of the teaching activities to the specific objectives of TIA2030. The main findings are summarised in the Conclusion chapter. The complete teaching-material collection (including syllabi, reading materials and instructions for each of the three courses), along with the presentation of TIA2030 and its objectives, is attached to this deliverable as separate files.

2. Implementation of the courses

The teaching activities covered the academic years 2023/2024, 2024/2025 and 2025/2026. Each course was planned to provide 30 teaching hours annually, equivalent to 90 hours per course over the project period. The courses addressed a common thematic framework at different levels of complexity, progressing from foundational understanding to practical application and advanced critical analysis.

Theories of Information Society – Bachelor's Level

"Theories of Information Society" is an obligatory undergraduate BA-level course (Informatics in Contemporary Society programme) whose main purpose is to familiarise students with the main concepts of the information society from historical, legal, economic and sociological perspectives. The

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course was amended as part of TIA2030 with the aim of introducing the emerging issues of Agenda 2030 and its Sustainable Development Goals, as well as relevant EU policies and their implementation in different national, regional and local contexts, in which technological innovations, also in the sphere of information technologies, can play a vital role.

While delivering content outlined in the course syllabus, the following topics were emphasised to take the relevant EU topics and nuances into account:

- subsidiarity and the EU information society policy in view of Agenda 2030 and its Sustainable Development Goals;
- EU Digital Agenda and transition to Sustainable Development Goals;
- information society, information technology and its contribution to multi-level governance in the EU in implementation of Agenda 2030.

The materials support students in comparing theories, relating concepts to empirical evidence and critically examining processes of social developments through a technology and innovation lense. Project-paper assessment (100% of the course grade) provides a setting for applying these perspectives to a selected topic.

This teaching activity has had two main impacts:

1. It delivered the relevant topics in EU studies, especially on Agenda 2030 and its Sustainable Development Goals in the context of the European information society, to future professionals and practitioners early in the formation of their professional development and enabled them to get familiar with relevant topics and internalise them. It also equipped students to understand the power of information technology in public diplomacy
2. It enabled the project team to develop relevant materials for undergraduate BA students and to test them, with the purpose of achieving excellent open educational resources results.

Projects of Information Technologies – Master's Level

"Projects of Information Technologies" is an obligatory master's MA-level course (Informatics in Contemporary Society programme) whose main purpose is to familiarise students with the main concepts and approaches in management of information technology projects. The course was amended as part of TIA2030 to introduce Agenda 2030 and its Sustainable Development Goals, which will permeate European Union projects across a variety of calls and initiatives until 2030. These calls and initiatives are key drivers of Agenda 2030 implementation in different national, regional, and local contexts, where technological innovations, including in information technologies, can play a vital role.

While delivering content outlined in the course syllabus, the following topics were emphasised to take the relevant EU topics and nuances into account:

- subsidiarity and the EU information society policy in view of Agenda 2030 and its Sustainable Development Goals;
- EU Digital Agenda and transition to Sustainable Development Goals;
- information technology projects and their contribution to implementation of Agenda 2030.

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The materials support learners in connecting policy objectives with project design and management decisions. Assessment combines a project report (80% of the grade) and a written examination (20% of the grade), bringing together practical application and understanding of the relevant concepts.

This teaching activity has had two main impacts:

1. It delivered the relevant topics from EU studies, especially on Agenda 2030 and its Sustainable Development Goals, to future professionals and practitioners early in the formation of their professional development. This enabled them to be prepared for the implementation of European Union co-financed technological innovation projects.
2. It enabled the project team to develop relevant materials for MA students and to test them, with the purpose of achieving excellent open educational resources results.

New Paradigms of Information Society – Doctoral Level

"Projects of Information Technologies" is an elective course for PhD students (Information Society programme). Its main purpose is to familiarise students with, and provide an in-depth understanding of, the ever-changing relationship between information technology and contemporary social change within the EU and abroad, which faces new, immense challenges that also led to the adoption of Agenda 2030 and its Sustainable Development Goals, and to encourage critical reflection on this relationship. Hence, the existing elective course was amended as part of TIA2030 with the aim of introducing the issues of Agenda 2030 and its Sustainable Development Goals, which will permeate the European Union's strategic development, as well as, in line with the principle of subsidiarity, that of macroregions, nations, regions, localities and even individual organisations. In this process, technological innovations, also in the sphere of information technologies, can play a vital role.

While delivering content outlined in the course syllabus, the following topics were emphasised to take the relevant EU topics and nuances into account:

- strategic development of the European Union and its grand strategies over time: Lisbon Strategy, Europe 2020, and Agenda 2030 and its Sustainable Development Goals;
- digital transformations, societal transformations, and transition to the Sustainable Development Goals in the EU and on the global level;

The materials support advanced interdisciplinary analysis and independent research. Assessment takes the form of an essay (100% of the grade) prepared to a standard suitable for potential submission to a peer-reviewed journal.

This teaching activity has had two main impacts:

1. The course expanded and reinforced the knowledge and understanding of information technology and technological innovations within the European context and in the global environment, upgrading the previously acquired skills and competencies with in-depth critical reflection on these processes, which are facing significant changes with the implementation of Agenda 2030.
2. It expanded the ability for in-depth critical reflection and analysis of the role of the European Union in the global environment, with a view to possibilities and obstacles to public diplomacy towards

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the third countries in the implementation of Agenda 2030 as main strategy of the EU and the UN.

3. Teaching materials and educational approach

The entire teaching-material collection (including syllabi, reading materials, and instructions for each of the three courses), along with the presentation of TIA2030 and its objectives, and other materials the project team may have identified as relevant, is attached to this deliverable as separate files. All of these teaching materials:

1. Address one or more challenges involving the European Union and its policies, especially with a view to Agenda 2030,
2. Develop learners' ability to address interdisciplinary problems,
3. Improve learners' understanding of the nature and methods of analysis in the field of EU studies.

The educational approach connects research and teaching through questions concerning the EU's implementation of Agenda 2030. Research literature, policy documents and empirical perspectives provide a basis for examining how strategic priorities relate to technological developments and their institutional and social contexts.

Student-centred learning is reflected in the emphasis on independent work, application and critical reflection. The different assignments allow learners to engage with the common themes at an appropriate level: interpreting concepts at bachelor's level, developing practical project responses at master's level, and undertaking advanced analysis at doctoral level.

The project's SOFIA framework provides a shared conceptual reference by drawing attention to institutions, social networks and cognitive frames. It encourages consideration of why technological solutions may produce different results across national, regional and organisational contexts. This supports an interdisciplinary approach combining information studies with sociological, political and management perspectives.

Open Innovation 2.0 provides the wider framework for connecting academic knowledge with the perspectives of policy-makers, practitioners, businesses and civil society. The course materials form the degree-level teaching contribution to that broader educational approach.

Identification of further study and research opportunities for all three courses

The three teaching materials collections also offer complementary directions for further study and research. At bachelor's level, these include exploring digital inequalities, participation and the relationship between information society theories and EU policies. At master's level, they include investigating the design, management and evaluation of technology projects addressing sustainable development priorities. At doctoral level, they include research into the institutional and social conditions of technological change, challenges in implementing Agenda 2030 and the EU's international role. These themes provide a basis for student research projects and further academic enquiry, including comparative studies across national, regional and organisational contexts. The

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publicly available materials will also offer starting points for researchers and educators in the wider academic community.

Contribution to the Specific Objectives of TIA2030

Implementation of the teaching activities associated with the three degree-level courses under Tasks T2.1-T2.3: "Theories of Information Society" at bachelor's level, "Projects of Information Technologies" at master's level, and "New Paradigms of Information Society" at doctoral level contributes to the following Specific Objectives of TIA2030:

- Specific Objective 1 – by incorporating research-related EU topics and Agenda 2030 into existing courses for students of information technology and the information society. This enables students to engage with European policy questions through subjects directly relevant to their studies and future professional activities.
- Specific Objective 3 – by combining technological, sociological, legal, policy and management perspectives. Across the three study levels, common questions about innovation and sustainable development are approached through theoretical interpretation, practical project work and advanced research. The materials therefore provide complementary resources for interdisciplinary EU studies.
- Specific Objective 4 – the English-language collection of teaching materials supports the educational exchange by providing resources that academic institutions in other countries can use and adapt. It provides a practical basis for transnational teaching cooperation and the exchange of educational approaches.
- Planned public access supports Specific Objective 5 by extending the availability of EU-related educational resources beyond enrolled students. Civil society organisations, practitioners and other interested audiences will be able to consult the materials for independent learning and discussion.

4. Conclusion

Deliverable D2.1 brings together teaching resources connecting the information society and technological innovation with EU policies and Agenda 2030 through the implementation of the three degree-level courses under Tasks T2.1-T2.3: "Theories of Information Society" at bachelor's level, "Projects of Information Technologies" at master's level, and "New Paradigms of Information Society" at doctoral level.

The deliverable supports the continued integration of these subjects into degree-level teaching. Attachments and public online publication of the complete teaching material collection will extend access to the resources and support their use beyond the host institution and the project period.

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