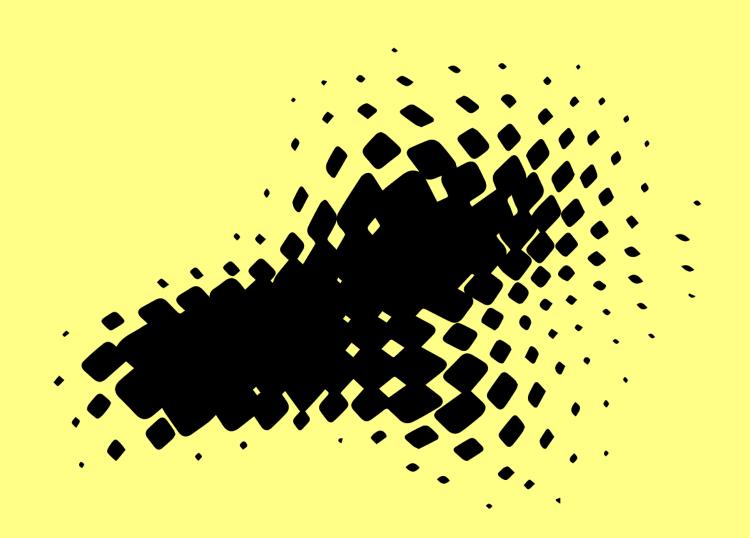


General rules of the Tray

Rules version 0.1 11/2022



About the general rules

Background

- As the first technical release components and pilots of the Continuous and flexible learning tray are getting near, generally accepted rules are needed for how HEIs operate in this service alone and together, adding up to an ecosystem of learning.
- The rules have two levels:
 - **1. General rules**, which are decided by the General Assembly
 - 2. **Practical rules**, which are decided by the Steering Group and parties authorised by it
- Detail will be added to the rules along with the technical release components. Not all functionalities and operating methods described in the rules exist as yet.
- Practical rules are already being drawn up by different parties, and efforts to get them together will start in early 2023.
- New actors will be brought within the scope of the rules once higher education institutions have the capabilities for this.

For whom?

- General rules 0.1 described in this presentation have been discussed and approved by the General Assembly of the project (22 November 2022). This means that the higher education institutions are committed to the operating methods and objectives specified in the rules.
- The primary target group of the **general rules** is higher education institutions' management. Others should also be familiar with the general rules.
- The practical rules will support those who engage in practical work related to the Tray (teachers, education planners, administration etc.) These rules consist of requirements and recommendations. The requirements are the minimum practical preconditions that must be fulfilled in order for the service to work. They will be clearly highlighted in the rules.
- Experts in each area will be engaged in formulating the practical rules.

Rules as the foundation of the Learning ecosystem (5171510)



Free and fee-paying education

1a. Organisation client

1b. Continuous learner

Free and fee-paying education

2. Education provider

Data, interfaces

3. Service provider

Rules

Technical, financial, legal, qualitative, pedagogical, data protection and other requirements

Themes of the general rules

- 1. Values and ethical principles
- 2. Data administration and sharing
- 3. Describing the offer of education and quality criteria for digital pedagogy
- 4. Principles for presenting the offer of education in the service
- 5. Principle of modularity in service contents
- 6. HEIs' responsibility for the education offered
- 7. The service and learners speaking different languages
- 8. Combining contents into entities
- 9. Communication by the service targeted at the learner

General rules for operating in the Tray 1/2

I. Values and ethical principles

The HEIs' activities and the service are guided by the values and ethical principles jointly defined by the HEIs. The HEIs undertake to comply with them.

2. Data administration and sharing

Each higher education institution owns the data concerning it that accumulate in the service and on the Data platform. Higher education institutions can see and share jointly agreed data with other higher education institutions.

3. Describing the offer of education and quality criteria for digital pedagogy

Higher education institutions produce descriptions of the education they bring to the service, the information content of which meets jointly agreed requirements. Learner-centric quality criteria for digital pedagogy support higher education institutions in producing high-quality and accessible offer for the service.

4. Principles for presenting the offer of education in the service

The service may recommend education for the learner, relying on its algorithm and the accumulated general and learner-specific data. The documentation of the algorithm is open to the higher education institutions and developed together with them. Visibility on the hit list of a search in the service is not for sale.

5. Principle of modularity in service contents

As part of their curriculum cooperation, higher education institutions develop modules for the service. Learners can use the modules to build themselves study units across the boundaries of higher education institutions.

General rules for operating in the Tray 2/2

6. HEIs' responsibility for the education offered

The higher education institutions are responsible for the practical implementation, functioning, quality, support, copyrights, etc. related to the education and teaching they offer on their individual learning platforms/environments. The Tray is not a learning platform (LMS).

7. The Tray and learners speaking different languages

Finnish and international learners speaking different languages will be taken into consideration in the contents and user interface of the service at a level that will be agreed together.

8. Compiling contents into entities

Higher education institutions and their joint projects can combine their contents to build modules visible in the service. For example, these modules can be thematic or specific to a field.

9. Communication by the service targeted at the learner

The service has functionalities that make it possible to inform learners about interesting contents within the service or through notifications sent from the service. The principles of displaying them and the operational model for content management will be developed in cooperation with higher education institutions.

PREPARATION AND LAUNCH OF HIGHER EDUCATION INSTITUTIONS' CHANGE PROGRAMMES

DEPLOYMENTS AT OTHER HIGHER EDUCATION INSTITUTIONS ~ Q3-Q4/24 -

PILOTING WITH HIGHER EDUCATION INSTITUTIONS Q2/23-Q2/24

PILOTING WITH HIGHER EDUCATION INSTITUTIONS Q3/22-Q3/23

PILOTING WITH HIGHER EDUCATION INSTITUTIONS Q4/23-Q4/24

Q1/2024

Q1/2023

Technical Release Component 2.0

Technical Release Component 3.0

Q3/2024

Offering is brought to the common platform, displaying and comparing it at a single location are enabled. Data starts to accumulate.

Technical Release Component 1.0

Building of interfaces, joint description of the offer and enrichment of information. Learners are identified, and data concerning them can be collected. Individual guidance and recommendations can be launched.

Learners can see their attainments, and labour market and competence data are tapped to give recommendations.

Display, filtering and comparison of the offer

- Events, open materials and recordings
- Thematic approach and meaningful filters for learners

Hyperlink based registrations

Migration to content or offer in an online service outside the Tray

Display, filtering and comparison of the offer

- Open university of applied sciences and university studies
- Entities produced in cooperation between higher education institutions

Identification of learners in the service and personal learning

- · Display of verified higher education attainments and study rights
- · Shows of interest in individual offer

Registration with education offered

• Linking registration information to the learner's profile and the HEI's information systems

Recommendation functionalities

· Based on interest expressed by the learner

Display, filtering and comparison of the offer

- · Specialisation training
- Separate studies
- Preparatory education for immigrants

Registration with education offered

Payment option at registration

My Learning

- Viewing of registration and payment history
- Display of study attainments completed elsewhere
- Micro-learning badges (?)

Recommendation functionalities

Based on learners' expressed interest, education history, competence and labour market data

Rules: General rules Q4/2022

Practical rules v.1 Q2/2023 For Technical Release Component 2.0

Both sets of rules completed in Q3/2024

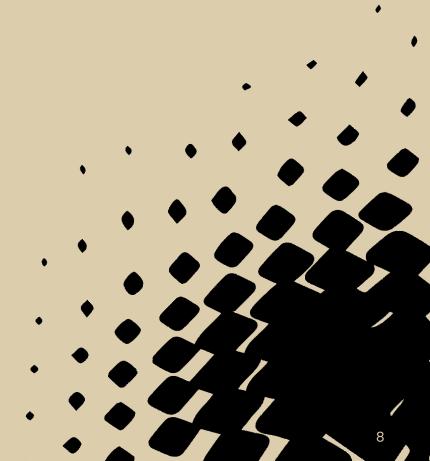
- Identification of HEI representatives
- · Adding, editing and deleting the offer
- Multilingual support for text content
- · Analytics describing usage data

- Searches in offer of education through the interface
- Enriching and combining the offer of education
- Analytics describing offer and usage data
- · Rules as part of managing the offer

- Processing of registration data through the interface
- Payment administration
- Analytics describing registration data
- Interfaces and raw data available to support knowledge-based management



General rules in black and white



1. Values and ethical principles of the Tray

Rule: The HEIs' activities and the service are guided by the values and ethical principles jointly defined by the HEIs.

- Higher education institutions apply the same ethical rules to education provided in the Tray as to other
 education they deliver. In addition, higher education institutions define and comply with common
 values for operating in the Tray. Among other things, these values guide data processing and
 management, production of teaching and learning materials, technology choices, product
 development and service design.
- 2. The data collected on the learner must serve the learner and learning.
- 3. The members and partners of the learning ecosystem are expected to respect the values of the Tray.
- 4. The values and ethical principles will be defined in more detail in early 2023.

2. Data administration and sharing

Rule: Each higher education institution owns the data concerning it that accumulate in the Tray and on the Data platform. Higher education institutions can see and share jointly agreed data with other higher education institutions.

- 1. Data will be accumulated through the Tray 1. in Tray analytics, 2. on the Data platform, 3. in higher education institutions' systems, and 4. in national data warehouses (see Figure on next page)
- 2. Data collected from different sources for the HEI's local and shared use will make it possible to develop the activities and offer of the Tray and higher education institutions, analyse the current situation and draw up plans for the future on the basis of a broad and rich foundation of data.
- 3. Data can be accessed through the interface as raw data or as pre-made dashboards/reports.
- 4. Learners own their data. As a rule, a learner's data will be processed in an anonymised form. The learner has the right and possibility to consent to the use of their data in association with their personal data.
- 5. Digivisio uses the data to produce services offered to Learners.
- 6. It is understood that at the beginning, the value of the data, its usability and the possibility of guiding the student in the Tray on its basis will be negligible. They will improve as the Tray is used and big data accumulates, especially after the launch and scaling of the Tray.
- 7. The principles of developing knowledge management approved by the Steering Group in October 2022 will be complied with.

Photo: Learners', higher education institutions' and national data circulating within the Digivisio framework

Data are accumulated legally and

following the agreed rules

DIGIVISIO

Learner's data

Learner's own data On the Data platform and in HEI environments

Digivisio data

Data on education offered and registrations

Tray usage data

Data accumulating on the Data platform

HEIs' data

Learner's activities on HEI platforms/LMS My Views of Data platform and Tray data

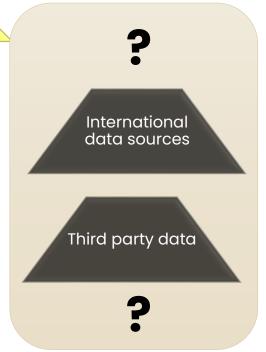
National data

Vipunen, Virta, Koski...

Ministries (Ministry of Education and Culture, Ministry of Employment and the Economy)

Labour market information, Open data sources?

consent, to deliver services for the benefit of learners The accumulated agreed rules and statutory requirements data will be used subject to and



3. Describing the offer of education and quality criteria for digital pedagogy

Rule: Higher education institutions produce descriptions of the education they bring to the Tray, the information content of which meets jointly agreed requirements. Learner-centric quality criteria for digital pedagogy will support higher education institutions in producing high-quality and accessible content for the Tray.

- 1. The learner uses the Tray to find as well as register and pay for education (depending on the functionalities enabled by the Tray).
- 2. Before decisions on scaling and launching the Tray have been made, the HEIs/networks/joint projects approved as pilots can add content to the Tray.
- 3. By providing check lists and similar, quality criteria for digital pedagogy will help different roles to ensure that the requirements related to such aspects as accessibility, inclusiveness, diversity, usability, life cycle, etc. are met. The quality criteria have two levels: requirements and recommendations.
- 4. In the early stages of the Tray, information on the offer of education will be uploaded to the Tray using a management application. As the development work progresses, the descriptions of education will be imported from the higher education institutions' systems as applicable. To this end, a common data model and requirements for the information on education offered will be built with system suppliers and other parties.
- 5. The education programmes and descriptions brought to the Tray must meet the set requirements. The Tray functionalities, including AI assisted learner guidance, will not work without a common way of describing the education contents. Next, the Steering Group will determine what the consequences will be if shortcomings in meeting the quality criteria are found.

4. Principles of displaying the offer of education in the Tray

Rule: The Tray may recommend education for the learner based on its algorithm and the accumulated general and learner-specific data. The algorithm documentation is open to the higher education institutions and developed together with them. Visibility on the hit list of a search in the service is not for sale.

- The basic principle of displaying the offer is that the learner gets the maximum benefit from the Tray both before and especially after logging in.
- 2. When searching the offer, the hit list order varies depending on such factors as whether or not the learner is logged in to the Tray, what kind of background information has been stored concerning a logged-in learner, and what kind of environmental information can be obtained on the learner (device, location, language, etc.).
- 3. The Tray may recommend education based on its algorithm and the accumulated general and learner-specific data.
- 4. The operating principles of the Tray algorithm will be described openly, and they will be administrated together with higher education institutions.
- 5. The better the quality of the education description, the better opportunities it has to be high up on the hit list of the search.

5. Principle of modularity in Tray contents

Rule: As part of their curriculum cooperation, higher education institutions develop modules for the Tray. Learners can use the modules to build themselves study units across the boundaries of higher education institutions.

- 1. In the future, the offer of education will consist of more diverse components with smaller units, which can be grouped into different entities based on various criteria, also automatically.
- 2. The preliminary information on, further possibilities for and assessment of modular studies must be planned and described in a manner that guides learning.
- 3. Modular content with smaller units will also enable the completion of small study units in different circumstances.
- 4. Higher education institutions' modular content planning can support more agile implementation of entities that meet different needs and help update the content.
- 5. The rules and quality criteria of digital pedagogy will support higher education institutions in the planning and implementation of modular content.

6. HEIs' responsibility for the education offered

Rule: The higher education institutions are responsible for the practical implementation, functioning, quality, support, copyrights, etc. related to the education and teaching they offer on their individual learning platforms/environments. The Tray is not a learning platform (LMS).

- The higher education institutions will themselves decide what educational content they wish to bring to the Tray.
- 2. As a basic premise, all content in the Tray will be visible to all learners, but the higher education institutions will determine who and under what terms can apply/register/participate.
- 3. The higher education institutions are responsible for the practical implementation, functioning, quality, support, copyrights, etc. related to the education and teaching they offer.
- 4. The Tray provides the learners with the support needed for its use.

^{*} LMS = Learning Management System

7. The Tray and learners speaking different languages

Rule: Finnish and international learners speaking different languages are taken into consideration in the contents and user interface of the Tray at an adequate level.

- 1. The higher education institutions will choose what content and in which languages they will bring to the Tray.
- 2. The descriptions of education content will, at minimum, be produced in the language in which the education programme itself will be delivered.
- 3. The higher education institutions will be responsible for the language versions of their education programmes and support related to them in the languages they offer.
- 4. The Tray will make participation in Finnish higher education possible for citizens of other countries. In practice, the precondition for this is education and descriptions offered in a foreign language.
- 5. The learner can select the user interface language of the Tray (Finnish/Swedish/English).
- 6. If necessary, the language elements of the Tray interface can be translated into new languages.

8. Combining contents into entities

Rule: **Higher education institutions and their joint projects can combine their contents to build competence modules visible in the Tray.** For example, these modules can be thematic or specific to a **field.**

- 1. Alone or together, higher education institutions can form thematic entities, including a degree programme or selection of courses, which is visible as a logical whole in the Tray.
- 2. As a basic premise, all education descriptions in the Tray will be visible to all learners, but the higher education institutions will determine who and under what terms can apply/register/participate in the education programmes/entities.
- 3. Detail will be added to the principles and functionalities of the thematic entities in connection with developing pilots and functionalities for the Tray.
- 4. Thematic entities may include content designed to be modular and other education offered in the Tray.

9. Communication by the Tray targeted at the learner

Rule: The Tray has functionalities that make it possible to inform learners about interesting contents within the service or through notifications sent from the service. The principles of displaying them and the operational model for content management will be developed in cooperation with higher education institutions.

- In addition to search and other functions, the Tray offers the learner topical, up-to-date and useful content.
- 2. For example, it is desirable to provide potential learners with information about new and topical content directly from the Tray, for example by means of notifications or other similar functionalities, and on the Tray, for example through content highlights or similar.
- 3. Higher education institutions' brands will be visible in the Tray and in its communications as agreed.
- 4. Higher education institutions may have spaces in the Tray where they can showcase their offer.
- 5. In addition to the functionalities of the Tray, various communication and marketing measures will be planned and carried out.

What next?

- 1. Presentation and practical implementation of the general rules
- 2. Language versions and communication
- 3. Definition of values and ethical principles (Q1/2023)
- 4. Mapping and compiling practical rules (Q1/2023 >)
 - 1. Technical release component 1
 - 2. Digital pedagogical rules and quality criteria
 - 3. ILP questions (licensing, etc.)
 - 4. Building offer for Technical Release Component 1
 - 5. Other areas
- 5. Next version of the rules $Q^2/2023$
- Contact person for the rules: Project Manager Kalle Huhtala, kalle.huhtala@csc.fi

