Handbook for EDIH CASSOVIUM

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1 INTRODUCTION

Welcome to the handbook that serves as a comprehensive source of information on the operation and management of the European Digital Innovation Hub (EDIH) CASSOVIUM. This handbook is designed to provide clear guidelines and standardized procedures essential for effective management and service development. EDIH CASSOVIUM aims to become a stable and innovative centre of digital innovation in the Eastern Slovakia region.

The goal of EDIH is to provide high-quality and efficient services that support innovative solutions for small and medium-sized enterprises as well as the public sector. This handbook helps to understand the strategy and the design of internal processes that will ensure the smooth operation of activities. The standardisation of procedures is a key element of the work, allowing for consistent and reliable results.

The following chapters present details on the services, organizational structure, and fundamental principles that will guide EDIH CASSOVIUM. An important part of the handbook is the description of processes that will ensure efficient operation and further development. I believe that this handbook will be a valuable tool for everyone involved in the activities of EDIH CASSOVIUM.

Miroslav Michalko
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EDIH CASSOVIUM

2 EDIH CASSOVIUM

The main objective of the EDIH CASSOVIUM project is to digitise small and medium-sized enterprises and public sector organisations in the region of its operation, i.e. in Eastern Slovakia. This digitisation is enabled and supported by a vibrant regional ecosystem in which EDIH CASSOVIUM operates in terms of the European and national schemes being implemented.

2.1 Philosophy and context of EDIH

2.1.1 Digital Europe programme

Launched by the European Union, the Digital Europe (DIGITAL) programme is a project aimed at boosting digital transformation across Europe. It aims to consolidate Europe's digital sovereignty and ensure that Europe's economy and society take full advantage of digital innovation. The programme is the first European Union instrument to increase the level of digital technology delivered to citizens and to help businesses and institutions to deploy and use digital solutions as widely as possible.

The programme focuses on several key areas:

- Investments in supercomputers and data infrastructures - High Performance Computing (HPC)
- Support the development and deployment of artificial intelligence (AI).
- Cyber Security
- Developing advanced digital skills of citizens and the workforce to be able to use new digital technologies effectively.
- The use of digital technologies in the economy and society
- Creating a network of hubs to support the digitisation of businesses and public services across Europe (European Digital Innovation Hubs - EDIH)

Digital Europe strengthens Europe's critical digital capabilities and how best to use them in the digital transformation of the EU's industrial and public ecosystems. The programme also focuses on upskilling to provide the workforce for these advanced digital technologies.

2.1.2 Definition of EDIH

The European Digital Innovation Hubs (EDIH) are a key tool for the European Commission to achieve the Digital Europe objectives and play an important role in the

digitalisation of the European economy and society. The network of EDIHs was set up to support the digitisation of European industry, in particular small and medium-sized enterprises (SMEs) and public institutions. The initiative is part of a wider European Union effort to strengthen digital transformation in Europe and thus achieve increased competitiveness in the Digital Single Market. EDIHs are deployed across Europe to ensure that the benefits of digital transformation are accessible everywhere, from urban to rural areas. It is by actively building a strengthened EIDH site that industry, small and medium-sized enterprises (SMEs) as well as public administrations are supported in their digital transformation.

EDIHs support companies in improving business/production processes, products or services using digital technologies by:

- Providing access to technical expertise and testing, as well as the opportunity to "test before investing".
- Providing innovative services such as financial advice, training and skills development that are key to a successful digital transformation.
- Helping companies to address environmental issues, in particular the use of digital technologies for sustainability and circularity.

EIDHs are one-stop shops that support companies (mostly SMEs) and public sector organisations to respond to digital challenges and become more competitive.

The main objectives of the creation of the EDIH network could be summarised in the following areas:

- **Providing expertise and support**: the EDIHs are tasked with providing expertise and support in the field of digitisation. They aim to help SMEs and public institutions to adopt and use digital technologies.
- **Testing and experimentation**: the EDIHs provide access to testing and experimentation facilities, enabling companies to test and optimise their digital innovations.
- **Promoting innovation and implementation of digital solutions**: the EDIHs should be designed to foster innovation and help create new digital solutions and services. They help to implement new technologies in the business environment, thereby increasing the efficiency and competitiveness of businesses.
- **Education and training**: an essential part of EDIH's activities is the organisation of training and awareness-raising workshops on digitisation and digital transformation.
- **Collaboration and networking**: last but not least, EDIHs are supposed to collaborate with each other to foster cooperation between different actors in

the ecosystem, including businesses, research institutions, technology providers, and public institutions where appropriate.

2.1.3 Evolution: competence centres - DIHs- EDIHs

Digital Innovation Hubs (DIHs) are support centres that aim to help businesses, especially small and medium-sized enterprises (SMEs), as well as public organisations, in their digital transformation. They are usually regionally focused to provide localised support but can also work together in wider national or international networks.

DIHs are designed to help bridge the gap between the latest technological developments and their practical application in real business environments, thus supporting innovation and digital transformation across Europe

The difference between DIH and EDIH is in several areas:

1. **Purpose and Focus:**
   - DIH - are local or regional centres
   - EDIHs - are a specific type of DIH selected and supported under the Digital Europe programme. EDIHs are designed to foster digital transformation at a pan-European level and can focus on specific areas.
2. **Geographical scope and coverage:**
   - DIH: established anywhere and usually serve local or regional needs.
   - EDIH: are spread across Europe to ensure even coverage and access to digital resources and expertise in different parts of the EU.
3. **Funding and Support:**
   - DIH: Their funding and support can come from a variety of sources, including national or regional funds, private investment or specific projects.
   - EDIH: They are mainly funded by the Digital Europe programme and other related EU initiatives.
4. **Services and Activities:**
   - DIH: They provide a wide range of services including advice, testing, demonstrations, training and support on accessing finance.
   - EDIH: Their services can be more specialised and focused on specific technological areas of priority for the EU.

In general, EDIHs are a special kind of DIHs that are part of a broader EU framework to support digital transformation at a pan-European level. DIHs can be based in different locations and have different sources of funding and focus, while EDIHs are specifically part of the Digital Europe programme.

2.2 EDIH network

2.2.1 Network structure

The European Digital Innovation Hubs combine the advantages of a regional presence with the opportunities available in a pan-European network. This regional presence allows them to provide the services that local companies need through a local language and innovation ecosystem. The European coverage of the network facilitates the exchange of best practices between centres in different countries, as well as the provision of specialised services in the regions when the required skills are not available locally.

The EDIH network, as European Digital Innovation Hubs, aims to help companies and public sector organisations to kick-start their digital transformation processes, using key technology solutions from the fields of Artificial Intelligence, Industry 4.0, cyber security and others, and last but not least to develop high-tech skills reflecting the requirements of the digital and green economy.

The EDIH network currently consists of 151 EDIHs co-funded by the European Commission's Digital Europe programme and 76 Seal of Excellence EDIHs.

2.2.2 Digital Transformation Accelerator - DTA

Through the EDIH network, the European Commission aims to build a dynamic community of hubs and other stakeholders that will foster networking, collaboration and knowledge transfer between EDIH, SMEs and mid-market capitalisation companies, the public sector and other relevant stakeholders and initiatives.

The Digital Transformation Accelerator (DTA) supports the achievement of this goal by managing the actual system of building and creating the EDIH network. The DTA aims to support and coordinate the consolidation and expansion of the European EDIH network through community building events and activities, training, collection and analysis of impact indicators, and nurturing the network's online presence and external communication.

The main objectives of the DTA will be to provide the following services:

- Community building and training, including advice to centres, provision of training services and materials, community building events.
- Linking with relevant initiatives, giving interested European digital innovation hubs the opportunity to engage in relevant regional, national and European initiatives.

- Impact assessment and pathway mapping: collection and analysis of key performance indicators (KPIs) defined for EDIH.
- Online presence, external communication, tools and support.
- Managing an interactive catalogue of European digital innovation hubs and other digital capacities funded by the Digital Europe Programme.

2.2.3 SK-EDIH

The Ministry of Investment, Regional Development and Informatisation of the Slovak Republic (MIRRI SR), as the implementer of the Recovery and Resilience Plan of the Slovak Republic, has launched a call for applications for the provision of funds for the mechanism for the purpose of establishing a network of European Centres of Digital Innovation and their support. In this call, EDIHs were defined as stand-alone organisations or coordinated groups of organisations (consortia) with expertise, based on a not-for-profit principle, whose objective is to provide support to micro, small and medium-sized enterprises, small companies with a medium market capitalisation and public sector organisations in building competitiveness and introducing innovative solutions in the field of digitalisation.

The actual mechanism for setting up and running the EDIH network was part of the Digital Europe framework. A grant call (DIGITAL-2021-EDIH-01) was implemented under this programme, which offered applicants the opportunity to apply for funding for the establishment and operation of the ECDI and the services provided.

The EDIHs in Slovakia were selected on the basis of a call and evaluation, which was the responsibility of MIRRI SR together with other relevant institutions. Applicants were assessed on their ability to support digital transformation, their innovation potential and their cooperation with other organisations and businesses.

European Digital Innovation Hubs were open to those who participated in the European Commission's call from November 2021 to February 2022. The Commission has allocated €6.2 million from the directly managed Digital Europe programme for their establishment in Slovakia. It then selected four projects to receive the grant. Due to the high quality of the projects, the Commission decided to award a Seal of Excellence to the Slovak Centre for Digital Innovation (SCDI), making it the fifth European Digital Innovation Centre.

Within the framework of this initiative, a total of 5 EDIHs were established in Slovakia:

EXPANDI 4.0

- specializes in supporting small and medium-sized industrial enterprises in digitalization. It will provide businesses with services ranging from digital maturity and cybersecurity audits, pre-investment testing, training, strategic and implementation advice, and assistance with the refinancing of digitization projects.
- Composition of the consortium: SIEA; Matador; SOITRON; SOVA Digital; Industry4UM

HealthHub

- The aim is to support structural reforms, innovation and digital transformation of the health sector in Slovakia in order to increase its quality and efficiency.
- Composition of the consortium: APEL

Hopero

- helps companies to take their digital transformation to the next level by providing independent advice in various areas of AI use to gain an edge over their competitors. It helps cities and public organisations with a comprehensive programme to develop sustainably and improve the quality of life in cities.
- Composition of the consortium: KInIT; CIVITTA; Sapie

SCDI (supported by: Seals of Excellence)

- Cybersecurity and education on the security and operational risks arising from the deployment and use of digital technologies is also a domain
- Composition of the consortium: ITAS; Digital Coalition; Unions; BIC Bratislava; STU; SAV; AISlovakia; 28 other partners

EDIH CASSOVIUM

- EDCASS helps to increase the competitiveness of SMEs and the efficiency of public sector organisations, in the Eastern Slovakia region, through the innovative use of digital technologies.
- Composition of the consortium: TUKE, UPJS, Košice IT Valley

2.3 Funding

2.3.1 Digital Europe (EU)

The Digital Europe (DIGITAL) programme delivers on the objectives set out in the European Data Strategy in realising the vision of a genuine single market for data. DIGITAL is strategic in supporting the digital transformation of the EU's industrial and public ecosystems. In addition, it focuses on upskilling to provide the workforce for these advanced digital technologies. It supports industry, SMEs, public administrations in their digital transformation through a strengthened network of European Digital Innovation Hubs. In this way, DIGITAL will accelerate economic recovery and drive digital transformation in Europe. Comprehensive surveys of development needs and priorities, based on the principles of the EDP (Entrepreneurial Discovery Process), are taken into account in the development of national and regional smart specialisation strategies.

The Ministry of Investment, Regional Development and Informatisation of the Slovak Republic oversees the implementation and launch of the European Digital Innovation Hubs (EDIHs) in Slovakia.

The project to establish a network of EDIHs is funded from two sources:

- EU budget - Digital Europe programme
- local resources of each country
    - In the case of Slovakia, the funding is from the Recovery and Resilience Plan under Component 17: Digital Slovakia.

The implementation of EDIH activities and the provision of services will be financially supported by the Mechanism (50%) and by the directly managed Digital Europe Programme (50%), and in the case of EDIH projects that have been awarded the "Seal of Excellence" (without financial support from the Digital Europe Programme), only by the Mechanism (100%), so that the services provided will be free of charge for the beneficiaries.

Image 1 - Sources of funding for EDIH CASSOVIUM project activities

2.3.2 Recovery and Resilience Plan of the Slovak Republic

The Recovery and Resilience Plan sets out a comprehensive package of reforms and investments to be implemented by 2026, supported by the Recovery and Resilience Facility. The plan consists of investments and reforms that address the challenges identified in the context of the European Semester, in particular in the European Commission's recommendations to Slovakia. The priorities of the Recovery Plan take into account the key problems of the economy and the most important societal challenges. They have been selected on the basis of a comparison of the country's performance against the EU average as well as common European priorities.

The Recovery Plan is the EU's joint response to the severe economic downturn caused by the COVID-19 pandemic. Its main objective is to support reforms and investment that will enable Slovakia to start catching up to the EU average.

RECOVERY AND RESILIENCE PLAN

The Recovery and Resilience Plan of the Slovak Republic is therefore divided into five main areas:

- Better education for all / quality education
- A competitive and innovative Slovakia (science, research, innovation)
- Green Slovakia / Green Economy
- Healthy living for everyone
- Efficient state (public administration) and digitalisation

The green economy will promote environmental sustainability, quality of life and contribute to the development of green innovation as one of the sources of economic growth. Education, science, research and innovation and health are among the areas where Slovakia is lagging behind most and where the European Commission has repeatedly recommended intensifying reform efforts. Efficient public administration and digitalisation are important factors affecting the business environment and quality of life.

The Office of the Government of the Slovak Republic has a Recovery Plan Section, which also serves as the National Implementation and Coordination Authority (NICA), which coordinates the implementation of the Recovery Plan at the national level. The NIKA is the single point of contact for communication with the European Commission for the Recovery Plan; it guides the actors in the implementation of the Recovery Plan; it supervises the implementers, intermediaries and beneficiaries; it develops the system for the implementation of the Recovery Plan; it monitors and evaluates the status of its implementation and other tasks. The Implementing Agency is the central government body designated by the Government to be responsible for the implementation of the

investment or reform in accordance with the Recovery Plan. In the case of EDIH projects, the Ministry of Investment, Regional Development and Informatisation of the Slovak Republic (MIRRI SR) is the implementing agency.

The Recovery Plan is a broad document based on a number of priorities that address key economic issues and major societal challenges. Each of these is made up of thematic components, of which there are eighteen in total. These include reforms and investments with a precise financial allocation as well as a timetable by which they are to be achieved. In the case of the EDIH projects, this is Component 17: Digital Slovakia (the mobile state, cyber security, fast internet for everyone, digital economy).

2.4 De-minimis

DM Scheme - 16/2022
Component 17: Digital Slovakia

In the conditions of the legal order of the Slovak Republic, the area of state aid and minimum aid is regulated primarily by Act No. 358/2015 Coll. on the regulation of certain relations in the area of state aid and minimum aid and on amendments and supplements to certain acts (hereinafter also referred to as the "Act on State Aid and Minimum Aid"). In the field of state aid and minimum aid, the Antimonopoly Office of the Slovak Republic performs the tasks of the coordinator. The Act in question regulates both the rules for granting State aid (§3 of the Act on State aid and minimum aid) and the basic rules for granting **de-minimis aid** (§4 of the Act on State aid and minimum aid). In addition to the division of aid into state aid and *de* minimis aid, the Act also distinguishes between forms of aid, namely direct aid and **indirect aid** (§6 of the Act on State Aid and Minimum Aid). For the purposes of EDCASS, the indirect form of de minimis aid contained in § 6(2)(e) *"consultancy service provided free of charge or for partial payment"* and (g) "other form of aid not listed in points (a) to (f)" are particularly key. An essential document under Section 7 of the State Aid and De-minimis Aid Act will also be the so-called **de-minimis aid scheme**, which is a binding document that comprehensively regulates the provision of aid to individual recipients.

The scheme for de minimis aid from the Slovak Republic Recovery and Resilience Plan to support the digitalisation of small and medium-sized enterprises (SMEs) and public sector organisations (PSOs) (hereafter also referred to as the "DM- 16/2022 scheme") regulates the provision of de minimis aid through the European Digital Innovation Hubs (EDIHs). The object of this scheme is to provide de minimis aid in the form of **indirect aid** and non-financial support through access to technical expertise and experimentation ('pre-investment testing'), consultancy, including financial

consultancy, provision of participation in national and international professional events, consultancy, professional training, skills development, rental of premises and technology and services necessary for the competitiveness enhancement and digital transformation of SMEs and PSO. According to the subject Scheme DM-16/2022, the provider of the assistance is the Ministry of Investment, Regional Development and Informatisation of the Slovak Republic and the provider's Digital Agenda Section is the gestor department. The individual EDCIs, including EDCASS, are in the position of implementers of the scheme and potential clients are initially (at the stage of applying for the provision of minimum assistance in the indirect form) applicants and, upon successful fulfilment of the conditions, which will be communicated to the applicants through the decision on approval of the application, they are defined as beneficiaries of the assistance. If in the verification process it becomes apparent that the potential client does not meet the conditions for de minimis aid, a decision will be addressed to him/her on the rejection of the application for de minimis aid in the indirect form, together with a justification of the decision or a specification of the reasons that led the scheme implementer to such a decision.

The maximum amount of de minimis aid that may be granted (including to all members of a group of undertakings forming a single undertaking with the applicant[1]) over a period of three consecutive fiscal years may not exceed € 200 000, including from other providers or under other de minimis aid schemes. An applicant for services in the EDIH will be eligible for de minimis aid up to a maximum of the difference between € 200 000 and the amount of de minimis aid received over the last three consecutive fiscal years. The services offered by EDCASS to interested parties are divided into four main categories and are published on the catalogue of services on the EDCASS website (https://edihcassovium.sk/sluzby/hodnota-sluzieb/). The present catalogue of services also contains an indication of the value of the services, on the presumption that this is not the price of the service, since all the services provided by EDCASS are provided **free of charge** to clients. The value of the services also includes project expenditure to ensure the day-to-day management of EDCASS, without which the provision of services of the required scope and quality would not be possible. The methodology for quantifying the value of the service is primarily based on the scope of the service provided, which reflects the different value levels of the service. The amount of de minimis aid provided will be 50% of the value of the service provided, for example for a service worth € 1 000 the de minimis aid will be € 500 as this is funding provided from the Recovery and Resilience Plan.

[1] The concept of 'single undertaking' should be understood in relation to the relevant legislation and case law of the Court of Justice of the EU, not excluding other documents of a non-binding nature in the form of recommendations, methodological guidelines or opinions (*soft law*)

In order to comply with Scheme DM-16/2022, the State Aid and Minimum Aid Act, Act No 523/2004 Coll. on budgetary rules of public administration and on amendment and supplementation of certain acts, or other related legislation or documents of a legally binding nature, potential clients will be **verified by** available tools (in particular publicly available registers such as ORSR, IS SEMP or commercial platforms such as Finstat and others) in the light of the basic determinants they represent - the size category of the enterprise (micro, small, medium-sized or small companies with a medium market capitalization, verification with which entities the subject entity forms/does not form a single enterprise, in what amount de minimis aid has already been drawn by the subject entity according to the IS SEMP portal, verification whether it is not subject to recovery of state aid on the basis of an EC decision in which this state aid was declared unlawful and incompatible with the internal market and whether, as of the date of submission of the application, the applicant is applying for the grant of other minimum or state aid from another provider or the same implementer, respectively. another implementer. The date on which the minimum aid is granted is the **date on which the contract granting the aid indirectly enters into force** or the date on which the event takes place, where the aid is granted on the basis of another legal act.

3 FORMATION OF EDIH CASSOVIUM

3.1 Historical predecessor of EDIH CASSOVIUM - DIH TECHNICOM

Technical University of Košice (TUKE) with its Competence Centre for Innovation in Manufacturing Systems in Industry and Services has been awarded the status of Digital Innovation Hub (DIH) within the MIDIH (Horizon 2020) project. This Hub has been named **DIH TECHNICOM** and has been gradually developed from January 2018 to August 2020 with significant support from the MIDIH project.

DIH TECHNICOM was a regional industrial DIH at TUKE, established as a specific workplace of the University Science Park TECHNICOM (which is a university-wide organizational component of TUKE - established as a HUB of innovation and technology transfer). This background and organisational status enabled DIH TECHNICOM to fully exploit the innovation potential of its ecosystem and to have adequate access to the university R&D ecosystem in its activities and services.

DIH Technicom's services and products supporting digital transformation processes guaranteed the corresponding "smart" concepts of the I4.0 strategy in production processes and services.

In line with its mission, DIH TECHNICOM at TUKE provided one-stop-shop services focused on the following groups of activities:

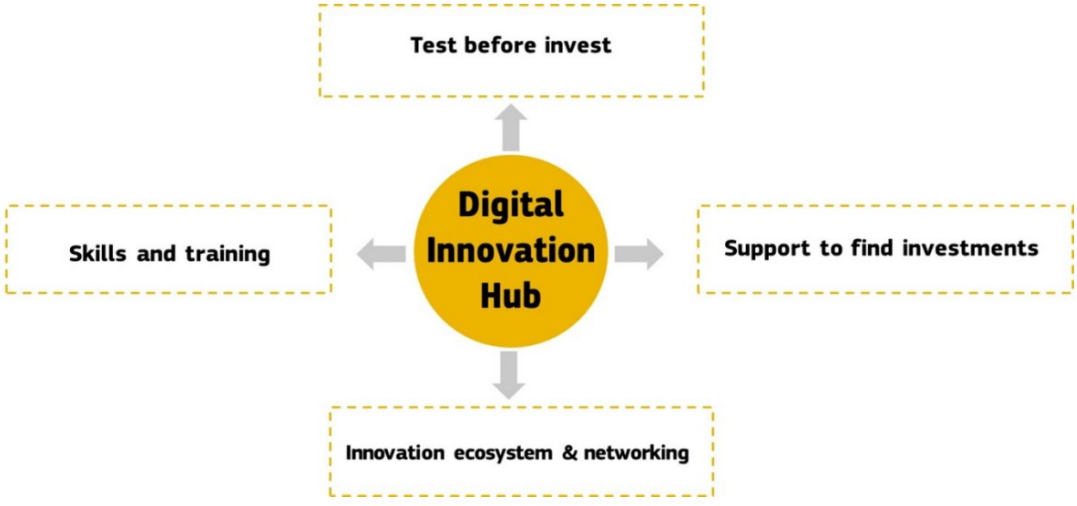


Image 2 - DIH activity groups

Table 1 -Activity groups DIH TECHNICOM and EDIH CASSOVIUM

Testing before investing ▪ raising awareness ▪ digital maturity assessment ▪ demonstration activities ▪ visions for digital transformation ▪ supporting the integration, adaptation and customisation of technologies ▪ testing and experimenting with digital technologies (hardware and software) ▪ knowledge and technology transfer **Skills and Training** ▪ promotion, hosting and training provision ▪ short-term training courses in digital technologies ▪ boot-campy;Internships ▪ work placements	**Support in finding investments** ▪ access to financial institutions and investors ▪ promoting the use of InvestEU and other relevant funding mechanisms **Innovation ecosystem and networking** ▪ Scouting, mediation, awareness creation, dissemination, ecosystem building ▪ market intelligence, market assessment, road-mapping, technology tracking ▪ workshops and seminars to share knowledge and experience ▪ representing interests at meetings and conferences, organising (country) visits, roadshows

DIH TECHNICOM actively cooperated with:

- Prototyping and Innovation Center (PaIC) - partner workshops allocated at the Faculty of Mechanical Engineering of TUKE.
- Relevant workplaces, e.g. in the field of artificial intelligence (AI), which are part of the Department of Cybernetics and Artificial Intelligence of the Faculty of Electrical Engineering and Informatics of TUKE.

The close cooperation of the presented "digital" innovation institutions significantly supported the European dimension, multidisciplinary and holistic approach of DIH TECHNICOM activities in the TUKE environment.

In 2023, the call 17I03-04-V01 was launched to build European Digital Innovation Hubs ("EDIH") to support the digitalization of Slovak SMEs and PSO.

The EDCASS project proposal has a strong strategic orientation and impact on the sustainable development of the Eastern Slovakia Region (ESK-REG). The strategic mission of the project is the result of the long-term involvement of the consortium partners in the regional development and innovation strategies and their implementation initiatives in the municipalities in the ESK-REG. Following the publication of the strategic intentions and actions declared in DIGITAL, these regional initiatives have contributed to the establishment of the EDIH CASSOVIUM consortium as a key regional driver for the effective application of the challenges of digital

transformation and innovation in ESK-REG.

EDCASS is gradually being built up as a unique one-stop digital innovation platform whose activities support the development and implementation of the required and tailored digital transformation application in the ESK-REG region.

EDIH CASSOVIUM is the first systemic solution to support the digitalisation of SMEs and PSO in the Eastern Slovakia region and aims to contribute to increasing their competitiveness and efficiency through the innovative use of digital technologies.

Objectives of the project

1) To support and accelerate the digital transformation of SMEs and PSO in the Eastern Slovakia region,
2) Support the further development of the regional innovation ecosystem,
3) Pilot the scheme for the operation of the European Digital Innovation Hub (EDIH).

The mission of EDIH CASSOVIUM (EDCASS) is to support and fulfil the objectives of the DIGITAL programme in the Eastern Slovakia region. These objectives will be implemented by a consortium of three top research and innovation institutions in the region, which are the founding members of EDCASS. These are:

- The internationally renowned Technical University of Košice (TUKE) - which coordinates the EDCASS consortium.
- The internationally renowned Pavol Jozef Šafárik University in Košice (UPJS).
- The highly recognised Košice IT Valley cluster (KEITVA).

3.2 Baselines for EDIH CASSOVIUM (impact on the region)

The aim of the EDIH CASSOVIUM (EDCASS) project is to help, through the innovative use of green digital technologies, companies and public sector organisations, especially in the Eastern Slovakia region, to increase their competitiveness and efficiency. EDCASS will deliver comprehensive and high-quality digital transformation services for SMEs and PSO built on three technology trends: artificial intelligence and robotics, Industry 4.0/5.0 and cybersecurity. These services will also be supported by active involvement in the pan-European EDIH network and active cooperation with other networks such as EEN, Startup Europe and others.

The EDCASS project consortium covers a wide range of multisectoral and multidimensional ICT areas that fall within the research and education competencies of both its universities. TUKE has seven engineering faculties covering the sectors of electrical and computer engineering (including ICT), mechanical engineering, manufacturing technology (including food technology), environmental engineering

(including mining, metallurgy, materials production, nanomaterials and materials recycling), civil engineering, aeronautics, and the Faculty of Economics and the Faculty of Arts (with a creative link to IT) complement these engineering disciplines. The aforementioned activities of TUKE are complemented by the sectoral orientation of UPJS with regard to its five faculties - Faculty of Medicine, Faculty of Science (with significant R&D departments in the field of IT and applied physics), Faculty of Law (with research on the interaction of IT and law), Faculty of Public Administration (with curriculum and project activities related to the digitalization of public administration) and Faculty of Arts. KEITVA, as the third partner of the consortium, complements the broad sectoral scope of the universities with an innovative environment covering a wide range of technologies and innovations through its more than 50-strong base of IT companies and relevant educational institutions and public authorities. It is this technological and knowledge potential of the EDCASS consortium partners that will help to effectively deliver digital transformation in commercial companies and public institutions belonging to their regional multi-sectoral environment.

The Eastern Slovakia Region (ESK-REG) consists of the Košice Self-Governing Region (KSR) and the Prešov Self-Governing Region (PSK), which are classified as "less developing regions" in the European context. Therefore, an important objective of EDCASS is to ensure that digital transformation and its services are easily accessible to all SMEs and public institutions in the region.

The vast majority of industrial and service companies in the ESK-REG fall into the category of SMEs or mid-cap companies (more than 95%), which are the core target group of EDCASS. Public institutions are also an important target group, especially in municipalities in ESK-REG, which are trying to implement digital solutions for the efficient delivery of their services in line with the relevant principles of the Industry 4.0/5.0 strategy. or the "Smart City" concept.

The EDCASS project clearly declares a regionally conceived concept aimed at supporting and securing the corresponding objectives of development strategies in both self-governing regions (NUTS3 - Košice self-governing region as KSK and Prešov self-governing region as PSK) of the Eastern Slovakia Region (ESK-REG) as NUTS2. The strategic position and competences of EDCASS in the ESK-REG are significantly strengthened by the fact that the partner institutions of the consortium are actively involved in the development and ongoing evaluation of the regional strategies and their action plans. This approach ensures long-term development and flexibility in the implementation of EDCASS services. On the other hand, it increases the responsibility for their appropriate and effective application in achieving the innovative objectives of digital transformation in the development of enterprises and institutions in the commercial and public sectors of the ESK-REG.

The maturity of the consortium is strongly complemented by the future convergence of the EEN and EDIH networks in the ESK-REG, thanks to the fact that the consortium coordinator (TUKE) is a partner of the EEN Slovakia network (from January 2022) and operates the EEN node for the ESK-REG. The consortium has current experience in cascading funding from EU projects in the context of the development of digital innovation hubs in Europe. TUKE has been successfully awarded 2 cascade grants in the BOWI and EUHUBS4DATA projects.

3.3 Technological and sectoral orientation

EDCASS is set up as an open one-stop-shop institution that guarantees its customers access to services and technologies supporting digital green transformation processes in line with relevant DIGITAL concepts and Industry 4.0/5.0 strategies.

The consortium's multispectral scope is also reflected in the multidimensional spectrum of information technologies that are the subject of the consortium's research and innovation activities. The key objective of EDCASS is to provide all four categories of EDIH services with an adequate, knowledgeable and technically sound range of information technologies guaranteed by the ecosystem of consortium partners. In line with its mission, these services and technologies are and will be supported by active linkages to the European DIH and EDIH networks and bilateral cooperation with appropriate partner research and innovation institutions. The sectoral and technological dimensions of EDCASS services are ultimately specified by the priorities of the national and regional smart specialisation strategies (2021).

Table 2 - Technological orientation of EDIH CASSOVIUM

▪ Artificial intelligence ▪ Cybersecurity ▪ Robotics ▪ CPS and IoT	▪ Big data, data analytics, data processing ▪ Nanotechnology and micro/nano electronics ▪ Sensor system ▪ Additive manufacturing	▪ Communication networks ▪ Simulation, modelling and digital twins ▪ Software systems ▪ Virtual, augmented and augmented reality (strong capacity)

EDCASS will focus on the following primary sectoral application areas: Consumer Products Manufacturing, Basic Materials Manufacturing, Machinery and Equipment Manufacturing, Telecommunications and ICT, Life Sciences and Healthcare. The sectoral coverage is complemented by services for public organisations. The technological coverage is shown in the table below.

3.4 EDCASS Strategy: Vision, Mission, Goals

The mission of the EDIH CASSOVIUM (EDCASS) project is to support the enhancement of European critical digital technologies and their best use in the eco-digital transformation of industrial and public ecosystems in the Eastern Slovakia Region (ESK-REG).
It is therefore important for EDCASS to ensure that its digital transformation services are easily accessible to all SMEs (95+% of all businesses in ESK-REG) and public institutions. The main objective of EDCASS is to provide one-stop support for the four categories of EDIH services with an adequate, knowledgeable and technically high-quality range of IT services guaranteed by the ecosystem of consortium partners. The consortium covers a broad spectrum of multi-sectoral and multi-dimensional ICT areas that fall within the research and education competencies of all partners.

To address the above, EDCASS sets the following strategic objectives:

- Provide regional SMEs and public sector organisations with quality services for their digital transformation (150 customers served);
- Contribute to the economic and innovative development of the region with the aim of increasing the DESI Index by 20%;
- Actively support the establishment of an effective regional system for the transfer of research results to business and public administration (up to 6 successful transfers);
- Motivate the development of a regional system of re/skilling and lifelong learning in the field of digital technologies and their applications;
- Further support for business acceleration programmes and their linkage with digital transformation objectives and EDCASS activities (15 startups incubated using EDCASS services).

The EDCASS platform is based on three fundamental pillars:

1) Artificial intelligence and robotics;
2) Industry 4.0/5.0 concepts, applications and implementation;
3) cybersecurity solutions for commercial and public entities. In line with its mission, these services and technologies are and will be supported by active links to the DIH, EDIH and other European networks (EEN, Startup Europe) and bilateral cooperation with appropriate partner research and innovation institutions.

The mission of EDIH CASSOVIUM (EDCASS) is to support and fulfil the above pillars in the Eastern Slovakia region. All EDCASS activities will have a strong impact on society in the region in general.

EDIH CASSOVIUM:

- It will deliver comprehensive and high-quality digital transformation services for SMEs and public sector organisations, built on three technology trends: artificial intelligence and robotics, Industry 4.0/5.0 and cybersecurity,
- It will develop high-tech skills in companies and public sector organisations that reflect the requirements of the digital and green economy. It will also incentivise the development of a regional system of re/skilling and lifelong learning in the field of digital technologies and their applications.
- It will help companies and public sector organisations to raise funds to finance their digital innovations,
- It will create a supportive incubation environment to accelerate high-tech startups,
- It will support the building of a regional digital innovation ecosystem with local, regional, national and European players in the field of digital transformation, including the transfer of research results to business and public administration.

3.5 Target groups of EDIH CASSOVIUM

European Digital Innovation Hubs (EDIHs) should be designed to support a wide range of target groups in their digital transformation and innovation activities. The groups that EDIHs come into contact with are predominantly:

- **Small and medium-sized enterprises (SMEs):** One of the key target groups is SMEs, which often lack the resources or expertise to effectively use and integrate digital technologies. EDIH provides them with access to expertise, technology solutions and infrastructure to help them improve their competitiveness and innovation potential.
- **Larger businesses and corporations**: while they may seem better equipped to handle the digital transformation, larger businesses can also use EDIH services to improve their innovation processes and technological development.
- **Start-ups and Scale-ups**: Dynamic and innovative businesses such as start-ups and scale-ups are also important target groups for EDIH as they can benefit significantly from access to specialised knowledge, networks and technologies.
- **Public sector**: public sector institutions, including municipalities, cities, counties, health and education institutions, are also targeted, as digitisation can significantly improve the efficiency and quality of public services.
- **Research and academic institutions**: EDIHs are expected to collaborate with universities, research centres and other academic institutions aimed at promoting research and development.

- **NGOs and NPOs**: EDIH can also support NPOs in implementing digital tools to increase their reach and effectiveness.

Based on the characteristics of the target group above, we can define the specific target groups for EDIH CASSOVIUM as:

Primary target group (the group to whom services will be prioritised):

- Small medium-sized enterprises
- Startups
- Public sector organisations (municipalities, cities, local governments)

The primary target group should be primarily from the Eastern Slovakia region (SK04), covering the Košice Self-Governing Region (SK042) and the Prešov Self-Governing Region (SK041).

Secondary target group (the group where the activities will be oriented towards communication and dissemination of the project outputs):

- Stakeholders: regional governments (municipalities), municipalities, policy makers, business support organisations
- Other academic institutions: primary and secondary schools, universities
- NGOs
- General public

EDCASS will use a variety of tools and channels to disseminate information about the project and its activities and will seek to maximise the impact of these activities on society. EDCASS will also serve as an "evangelization" forum to raise awareness on issues of digital transformation of the economy and society.

The aim of EDIH CASSOVIUM is to provide tailored services and support to different target groups so that they can successfully undergo digital transformation, thereby increasing the overall digital competitiveness and innovation capacity in the region as well as in Slovakia.

3.5.1 EDIH CASSOVIUM value for the client

Based on the analysis of EDIH CASSOVIUM's target customer group and products, the VPC for EDIH CASSOVIUM is proposed in the following table:

Table 3 - Value proposition canvas for EDIH CASSOVIUM

EDIH CASSOVIUM	Clients
Product & services	**Tasks**
4 basic groups of services: A) Testing innovative technologies, digitalisation and automation (Test before invest) B) Education and skills building C) Support for obtaining sources of funding D) Networking and innovation ecosystem	▪ The need to get information about funding opportunities for their projects ▪ Securing project funding ▪ Testing of technological prototypes on special instruments and equipment ▪ Optimization and digitalization of processes in various areas: production, business, HR, IT ▪ Implementation of application support
Gain creators	**Gains**
Easier and risk-free testing of innovations before major investments: ▪ Reducing the costs and risks associated with innovation projects Opportunity to gain certified IT skills and training: ▪ Providing a competitive advantage through certified knowledge Assistance in raising the necessary funds: ▪ Providing a competitive advantage to secure favourable financing for innovative projects Assistance in establishing contacts with relevant partners: ▪ Promoting sustainable growth through strategic alliances and information sharing	Getting the necessary funding for digital innovation: ▪ Faster implementation of new solutions into practice Acquiring advanced digital skills and technical abilities: ▪ Increased process efficiency Developing networking and cooperation between different sectors: ▪ Access to new solutions and technologies ▪ Getting new input and experience from companies that are tackling similar innovations
Pain relievers	**Pains**
Helping to overcome financial barriers to digital innovation: ▪ Securing resources for innovative projects and reducing financial risk Providing insight and support in the acquisition of technology skills: ▪ Ensuring access to information on the latest technological trends and providing training opportunities Creating an environment for linking different sectors and achieving synergies: ▪ Promoting networking and cooperation between the business, academic and technology sectors ▪ Acquiring new customers/suppliers/partners	Difficulties in finding suitable financial instruments: ▪ Limited possibilities to identify and obtain funding for innovative projects Poor overview of technological trends and innovation opportunities ▪ Limited speed of project progress, insufficient development ▪ High error rate / complaints / claims ▪ Technological backwardness, poor ICT, insufficient information on operations ▪ Poor education on the latest trends, skills and opportunities in the industry ▪ Falling behind the competition Lack of contacts to the business sector, academia, technology industry: ▪ Lack of company growth ▪ Use of obsolete materials/processes

3.5.2 Client Relationship Design

An innovation hub like EDIH CASSOVIUM needs to have an established relationship with its clients in order to be able to operate sustainably and in the long term to meet its goals. In order to establish long-term and sustainable relationships with clients, the following aspects need to be taken into account:

Identification of customer segments
Market analysis and identification of different customer segments based on demographic, psychological, behavioral and geographic characteristics. Segments may include different customer needs, preferences and behaviours.

Personalised marketing campaigns
Creating personalized marketing campaigns for each segment, focused on the specific needs and interests of the segment. Using different communication channels relevant to the specific segment.

Personalised content
Providing content that is relevant to a specific segment, which may include tailored products, advice or offers. Focusing on creating value for each segment.

Personalised approach
Implementation of a personalized approach to customers in customer service and support. Creating specific solutions for the needs of each segment.

Innovations and updates
Continuous innovation and updating of products and services according to the latest trends and technologies are key to staying competitive. Keeping customers informed of new improvements and product developments adds value and increases customer satisfaction.

Establishing trust
Building trust between the brand and customers should be a priority. Transparency around processes, privacy policies and ethical standards strengthens relationships and provides reassurance to customers.

A proactive approach to problem solving
Anticipating potential problems and addressing them proactively before they become critical is essential. Responding quickly and effectively to problems as they arise builds customer confidence.

Educational materials
Providing access to information resources and training helps customers make better use of products or services. This helps customers gain better skills and comfort in using products and services.

Stable presence on social networks

Active participation in social media, responding to customer comments and questions, and following trending topics are important to maintain social relevance and ensure interaction with customers.

Support for socially beneficial activities

Involvement in socially beneficial activities or projects strengthens the positive perception of the brand and contributes to building a positive image.

Extending the offer based on feedback

Use customer feedback to expand or customize the offer. Customized products or services have the potential to increase customer satisfaction and loyalty.

Monitoring and analysis of customer behaviour

Using customer behaviour tracking tools to collect data on preferences and interactions with products or services, regularly updating this data and adapting the strategy according to new information.

4 ORGANISATION OF EDIH CASSOVIUM

EDIH CASSOVIUM is a consortium without legal personality, which was established on the basis of a consortium agreement concluded between three parties: the Technical University of Košice as the main partner (hereinafter referred to as "TUKE"), the Pavol Jozef Šafárik University in Košice as partner No. 1 (hereinafter referred to as "UPJS") and Košice IT Valley z.p.o. as partner No. 2 (hereinafter referred to as "KEITVA"). The potential of each partner to contribute to the mission and objectives of EDIH CASSOVIUM is determined by their primary focus.

4.1 EDIH CASSOVIUM Consortium

4.1.1 Technical University of Košice

The Technical University of Košice (TUKE), founded in 1952, provides the whole complex of educational, research and innovation activities in the field of technical sciences, economics and arts in the ESK-REG region. The development and transfer of knowledge in the broadest sense is constantly a major concern of the University. TUKE strives to maintain coherent and interdependent relationships between teaching, research and innovation activities in line with the European state of the art.
The university consists of 9 faculties:

- Faculty of Mining, Ecology, Management and Geotechnology;
- Faculty of Materials, Metallurgy and Recycling;
- Faculty of Mechanical Engineering;
- Faculty of Civil Engineering;
- Faculty of Electrical Engineering and Computer Science;
- Faculty of Production Technologies;
- Faculty of Economics;
- Faculty of Arts
- Faculty of Aviation

The university has roughly 9 500 students and 1 400 employees. Seven technical faculties support internationally recognised quality science and research through seven centres of excellence.

Innovation and technology transfer at TUKE is centrally coordinated by the University Science Park TECHNICOM (UVP), which is established as a university-wide innovation centre (where there is: a centre for innovation and technology transfer; an acceleration programme; intellectual property protection, etc.). Since 2014, UVP has been operating

the Startup Centre and the TUKE Incubator - the leading acceleration programme in the ESK-REG.

UVP supports the VUKONZE Centre (Competence Centre for Intelligent Use of Renewable Energy Sources), which is an active network of 13 specific laboratories at TUKE and the Slovak Academy of Sciences in Košice. In the field of digital transformation in manufacturing sectors, there are two fully operational Digital Innovation Centres (listed in the JRC catalogue): the DIH TECHNICOM established under the H2020 MIDIH project and the Robotic DIH established with the support of the H2020 RIMA project. TUKE has been a member of the EIT RawMaterials KIC since 2015 through the BERG faculty and operates the Regional Innovation Centre Košice established in January 2018 by the European Institute of Innovation and Technology (EIT) within the framework of the EIT RawMaterials KIC in close cooperation with UVP. Similarly, TUKE is represented in the H2020 AI4EU project (825619, A European AI on Demand Platform and Ecosystem), through the Department of Cybernetics and Artificial Intelligence (DC&AI). With the support of the project, the Slovak AI Meetup serves as a networking platform for expert seminars and discussions on Artificial Intelligence (AI) topics. The AI focus of TUKE is strongly supported by the joint research and development laboratory AI4Steel Lab, which was established in cooperation with U.S.Steel Košice.

TUKE cooperates closely with the Centre of Scientific and Technical Information of the Slovak Republic - the result of this cooperation was the establishment of a joint workplace Innovation Centre of Information and Communication Services to support science, research and technology transfer, which also includes the central management of National Telecommunications and Infrastructure (NTI).

4.1.2 Pavol Jozef Šafárik University in Košice

The Pavol Jozef Šafárik University in Košice (UPJS) is one of the important and recognized educational and scientific institutions not only in Slovakia but also in Europe. At present, UPJS has five faculties:

- Natural Science
- Medical
- Legal
- Faculty of Public Administration
- and the Faculty of Arts.

UPJS wants to strengthen the creative and organizational base of scientific research, innovation and artistic activities with the support of quality research based on broad international cooperation. It aims to use the potential of university science parks and R&D centres of excellence for the quality development of biomedicine, materials

research, IT, digital technologies with the creation of significant intellectual property and the subsequent transfer of research results into practice. At the University, six centres of research excellence support internationally recognised levels of science in the faculties of natural sciences and medicine. According to the evaluation of the Slovak Accreditation Agency and the Ministry of Education, UPJS has been awarded the status of Top Research Teams in Computer Science. A CSIRT department with international accreditation has been established at UPJS to provide services for internal and external clients. UPJS is a member of national platforms in the field of quantum technologies and computing and artificial intelligence and also a member of the Budapest node of EIT Digital.

UPJS innovation activities are integrated in the Technology and Innovation Park (TIP) - a stepping stone to a more comprehensive centre that would link activities in the field of transfer of science and research results across the whole ESK-REG.

TUKE and UPJS participated in the implementation of three major projects of science parks and research centres supported by EU funds in 2013-2018. These projects were the basis for the creation of European-level research and innovation infrastructures at both universities:

- Project University Science Park TECHNICOM - an internationally recognised centre for research and technology transfer in the field of innovative applications in support of knowledge-based technology.
- The strategic goal of the project for the PROMATECH Research Centre is to establish a national centre for research on advanced materials (including nanomaterials) and technologies for current and future applications.
- USP MEDIPARK was established within the MEDIPARK Košice project with the aim to build a university biomedical science and technology park, which would be a top national and international centre for applied research and its transfer into practice in the field of biomedicine.

4.1.3 Košice IT Valley

Košice IT Valley (KEITVA) is an internationally recognized regional cluster of IT companies and an important stakeholder in the economic transformation of ESK-REG. It consists of 82 members, active in the fields of information technology, education and public administration. IT Valley plays a key role in the development of the IT industry in the Košice region. It was established in 2007 as a joint initiative of educational institutions (including TUKE and UPJS), local government and leading IT companies. Later in 2012 it was transformed into a cluster and in 2015 it received the "Cluster Management Excellence Label GOLD" certification as the first in Central Europe.

Top international IT companies are implementing unique projects in healthcare, smartcity, energy, transport and metallurgy. Thanks to their innovative approach, other projects have been launched in ESK-REG, which have contributed to the significant development of the IT ecosystem. KE IT Valley ensures the long-term development of the business environment to enhance the innovation performance of the region. The cluster also organises training activities to build skills for the 21st century.

Another influential aspect of KEITVA is the cooperation with local and regional governments. KEITVA leads a city-level working group responsible for opening up city data, building an open data platform and co-developing and commenting on regional innovation strategies.

Raising awareness of the importance of information technology and digitisation is one of the cluster's core activities. The low level of digitalisation of SMEs and the lack of skilled IT workforce are among the main barriers to the region's development. KEITVA, in cooperation with UPJS and TUKE, organises various information and evangelisation seminars and campaigns to highlight the benefits of digitalisation. As a result, new innovative companies are being created and existing companies are developing within traditional industries.

4.1.4 Legal contract ecosystem

The legal contract ecosystem is represented above all by its multi-layered nature and the need for contractual regulation of legal relations at multiple levels. For a better approach and systematisation, the contracts on the basis of which EDCASS itself is created, as well as other related attributes (financing, cooperation, etc.), should be divided into the following categories:

- Fundamental EDCASS agreements on the basis of which the consortium was established and is governed,
- Contracts with public authorities (European Commission, MIRRI, and others),
- Contracts with clients,
- Memoranda with stakeholders,
- Intra-institutional contracts of individual partners (optional, not yet implemented).

Fundamental EDCASS Agreements

EDCASS is a consortium composed of three partners that can be legally considered as legal entities - having full legal personality, i.e. the capacity to have rights and obligations. However, the consortium itself is not a separate legal entity. The consortium was established to pursue the stated objectives, which are reflected in the values and principles of EDIH CASSOVIUM. The cooperation of the consortium partners

has been captured in writing in the form of a Memorandum of Cooperation, dated 13.11.2020. Subsequently, a future contract was concluded between the partners of the consortium, which regulated in more detail the rights, obligations and conditions of cooperation of the entities, anticipating the implementation contract, represented by the consortium contract (consortium agreement), dated 22.06.2022, comprehensively regulating the contractual obligations of the partner. The individual contracts that have been concluded between the partners of the consortium are specified below as follows:

Memorandum of Cooperation number 9/190001/2020-MEM

- Concluded between TUKE, UPJS and IT Valley
- Concluded on 25.09.2020 / entered into force on 13.11.2020
- Concluded for the purpose of cooperation of the Contracting Parties in the creation of the European Centre of Digital Innovation in Slovakia within the framework of participation in the competition of the Ministry of Investment, Regional Development and Informatization of the Slovak Republic and the Ministry of Economy of the Slovak Republic entitled "European Centres of Digital Innovation in Slovakia".

Future Contract Agreement

- Concluded between all three consortium partners
- Concluded on 11.10.2022 / entered into force on 01.11.2022
- The subject of this Agreement is the regulation of the rights, obligations and conditions of cooperation of the Parties in the preparation and submission of the grant application for the Project within the call European Digital Innovation Hubs (DIGITAL-2021-EDIH-01), as well as the regulation of the rights and obligations of the Parties in the event of a successful evaluation of the Project by the European Commission and the subsequent offer addressed to TUKE for the conclusion of a grant agreement.

Consortium Agreement

- Signed by all consortium partners
- Concluded on 21.06.2022 / entered into force on 22.06.2022
- The purpose of the Consortium Agreement is to specify, in relation to the EDIH CASSOVIUM Project, the relationship between the Parties, in particular with regard to the organisation of work between the Parties, the management of the Project and the rights and obligations of the Parties regarding, inter alia, liability, Access Rights and dispute resolution.

Contracts with public authorities (European Commission, MIRRI, and others)

In addition to the contracts on the basis of which the EDCASS consortium was established, the contracts concluded with public authorities are also essential. In particular, the grant agreement with the European Commission comprehensively regulating the duration of the project, the budget and other constitutive aspects of the EDIH CASSOVIUM project. The Recovery and Resilience Facility Grant Agreement with the Ministry of Investment, Regional Development and Informatization regulates the relationship between the consortium partners and MIRRI in light of their mutual position as minimum assistance provider and implementer of the DM- 16/2022 Scheme. Their specification is set out below:

- Contract between the EU and all three consortium members (TUKE, UPJS, KE IT Valley)
- For the European Commission (DG for Communication Networks, Content and Technology, CNECT.A - AI and Digital Industry, A.4 - Digital Transformation of Industrial Ecosystems)
- Concluded on 18.10.2022 / entered into force on 01.11.2022
- This Agreement sets out the rights and obligations and the terms and conditions applicable to the grant
- Awarded for the implementation of the action referred to in Chapter 2.

Recovery and Resilience Facility Grant Agreement (Synergy Grant)

- Contract between MIRRI and TUKE
- Signed / published: 21.7.2023 / 27.7.2023
- The Synergy grant enabled the co-financing of EDIH CASSOVIUM's activities with funds provided by the Ministry of Investments, Regional Development, and Informatization (MIRRI). These funds constitute exactly half of the total budget, i.e., a 50 percent co-financing from the resources of the Slovak Republic's Recovery and Resilience Plan. The contract has been signed and, in accordance with the applicable legislation, published in the Central Register of Contracts of the Slovak Republic, where it is publicly accessible. The contract is in the Slovak language.

Contracts with clients

The DM-16/2022 scheme distinguishes between two types of services - individually provided services and group provided services. In addition to the basic distinguishing determinant, which is the nature of the service itself, another distinguishing feature is the **legal basis for the provision of services**. The DM-16/2022 scheme distinguishes in this respect between the provision of services on the basis of **a contract** (individually provided services) or on the basis of an **application** (group-provided services). It also foresees a so-called **indirect aid contract**, the elements of which it itself lays down (defining who is the recipient of the aid, the amount of aid granted to a particular

recipient, the definition of the service provided, etc.). As this type of contract is not included in any legal regulation (e.g. Commercial Code, Civil Code or other specific legal regulation) it can be classified as an innominate contract. It also allows for the conclusion of a framework contract to cover a situation where a beneficiary is to participate in a series of training courses, consultations, events organised over a certain period of time or a number of services are to be provided to a single beneficiary by a single contractor over a certain period of time, provided, however, that it contains all the above-mentioned elements.

EDCASS offers a diverse portfolio of services to prospective customers, which reflects the types of contracts that are expected to be used. Priority will be given to the provision of services to clients, or to the execution of certain work for them, or even to the execution of other services for them. Consideration should also be given to the fact that the work to be produced for the clients may (or may not) meet the definition of a work of authorship under Article 3(1) of the Copyright Act, which provides that "the subject matter of copyright is a work of literature, art or science which is the unique result of the creative mental activity of the author perceptible to the senses, irrespective of its form, content, quality, purpose, form of expression or degree of completion." Whether a particular work will constitute a work within the meaning of the Copyright Act must be assessed on a case-by-case basis.
With reference to the above, we therefore list below the contract types that are most relevant to us and whose application is envisaged. Which contractual type will be applied to a particular contractual relationship and which attributes need to be regulated (liability regime of the parties, aspects of intellectual property rights, etc.) and what will need to be regulated (e.g. confidentiality of the parties, definition of confidential information, etc.) will be based primarily on the performance to be performed. For the reasons set out above, it will therefore be necessary to start from certain model contracts, which will subsequently be specified and customised for the specific service/work, which can and will include the addition to such model of the specificities associated with the provision of a particular service/performance of a particular work. A portfolio of working versions of model contracts and documents will be made available to authorised persons on shared repositories.

A summary of the contract types and the underlying legal documents that should be considered relevant and likely to apply:

1. Innominate/unnamed contract pursuant to Section 269(2) of the Commercial Code

The unnamed contract is reflected in Section 269(2) of the Commercial Code, which provides that "the parties may also conclude a contract which is not regulated as a type of contract. However, if the parties do not sufficiently specify the subject matter of their obligations, the contract is not concluded." This type of contract is the broadest

in nature and is capable of covering a wide range of services. Referring to the brevity of the statutory provisions, there is a truly wide disposition to regulate the rights and obligations of the parties.

2. Contract for work according to § 536 of the Commercial Code

Frequently used contract type, which is regulated in the Commercial Code in a rather detailed manner. The dispositive nature of the regulation in the Civil Code allows for the use of a wide contractual freedom of the contracting parties in the conception of a specific contract.

3. Licensing agreement for industrial property pursuant to § 508 of the Commercial Code

The contractual type in question is intended to regulate the exercise of industrial property rights between the provider and the acquirer to an agreed extent and in an agreed territory for the exercise of industrial property rights. The type of contract in question is intended, for example, for inventions, utility models, industrial designs, topographies of semiconductor products, the right to new plant varieties and animal breeds, trademarks, designs, etc. From a legal point of view, a distinction should be made between a licence agreement for industrial property objects and a licence agreement under the Copyright Act.

4. Licence Agreement pursuant to § 65 of the Copyright Act

Not every contract subject to which a work is to be made will constitute a "pure" contract for a work without any copyright implications (as we also state above). If the subject matter of the service to be provided to the client will be the making of a work that meets the definition of a copyright work, a licensing agreement under section 65 of the Copyright Act should be applied to the legal relationship.

5. Consents to the processing of personal data (GDPR) and consortium partners' agreement on joint processing of personal data

Consent to the processing of personal data in accordance with the GDPR Regulation or Act No. 18/2018 Coll. on the protection of personal data must be addressed to natural persons, i.e., for example, managers in a limited liability company, employees of the client with whom the communication will be made, since the GDPR does not apply to legal entities (e.g., s.r.o., a.s.), but only to natural persons. In order to effectively communicate with each other, it is essential to have the contact person's data, which constitutes personal data within the meaning of data protection regulation. It is necessary to specify the scope, purpose and duration of the data processing and to inform the data subject in the document concerned of his/her rights in relation to the processing of personal data. The consortium partners' agreement on joint processing of personal data can be described as an optional document which is intended to regulate the mutualrights and obligations of the consortium partners in the processing

of the data with which the data subjects come into contact. The consortium agreement provides for this agreement as an optional option to regulate relations in the defined area.

6. Confidentiality agreement/protection of confidential information

The non-disclosure agreement may be part of the implementation contract itself or it may be drafted as a separate document, i.e. an unnamed contract. Here again, it is necessary to specify what specific data/information the contracting parties will consider necessary to protect, in what way and to what extent. Account should be taken of the fact that trade secrets which may be at the disposal of an entrepreneur interested in the services and the use of which may prove necessary in the performance of the services do not need to be specifically provided for in the contract, whereas the protection of trade secrets is explicitly provided for by law (Article 17 or Article 51 of the Commercial Code).

7. Affidavits of eligibility for State aid and application for de minimis aid

The interested party applies for the provision of services by submitting an application for de minimis aid under Scheme DM 16/2022. In addition to the application, the interested party (in the terminology of Scheme DM 16-2022, *the applicant)* is required to complete and submit declarations. The declaration is a specific document in nature as it cannot be described as a contract or an agreement as it is a unilateral legal act addressed by the client to EDCASS. This document is key in verifying the critical facts for the provision of minimum assistance, i.e. the disbursement of funds under the DM - 16/2022 Scheme (i.e. 50% of the amount that will represent the total value of the service). By the unilateral legal act in question, the applicants for services declare the data which EDCASS is obliged to ascertain and subsequently verify for accuracy, the applicant declaring that the data submitted by it is true and complete. In particular, the data relating to the categorisation of the undertaking and the size of the undertaking (whether it is a micro, small or medium-sized enterprise, or a small company with a medium market capitalisation), the previous use of minimum aid (whether the company has not exceeded the legal limit for de minimis aid), whether it forms and, where appropriate, with whom the undertaking forms the so-called 'de minimis company', and whether it is a company with which it forms a 'small or medium-sized enterprise'. the fact that the entrepreneur is a single enterprise, whether it is not subject to recovery of State aid on the basis of a decision of the European Commission, and a declaration as to whether, at the date of submission of the application, the entrepreneur is applying for other minimum aid or State aid from another provider or from the same implementer or from another implementer.

The persons competent to verify the truthfulness and completeness of the above attributes will verify the data in question, but if it is found that the applicant has provided false, incomplete or misleading information, with the result that the aid

cannot be granted, the applicant will be informed by a decision rejecting the application for de minimis aid. If the verification does not lead to the conclusion that the information is incorrect, the services will be provided to the recipient and only afterwards it will be found that they were not provided in accordance with the DM-16/2022 scheme or other legal provisions, legal liability will be incurred towards the recipient of the service who has provided incorrect information in his/her declaration.

Intra-institutional contracts of individual partners

The individual partners of the consortium (TUKE, UPJS and KEITVA) are entities that are systematically structured internally with regard to the purpose for which they were established. The portfolio of services offered by EDCASS through the consortium partners is usually provided by individual departments that are integrated in the structure of these entities (usually faculties, departments, institutes, expert centres, etc.). In view of the fact that EDCASS is a pilot project, the relationships within the individual partners have not yet been regulated at the a priori level of the partners, contractually or otherwise. However, the consortium partners perceive this possibility as not yet realised, but possibly exploitable, and do not exclude and accept its use in the future when the need arises. The means of regulating internal relations will be tailored to the objective of quality service delivery to clients.

4.1.5 Stakeholders

In order to achieve its objectives, EDIH CASSOVIUM is closely linked to various stakeholders who play a key role in its development, success and impact at local, regional and even European level.

EDIH CASSOVIUM stakeholders include funders, founding universities, team members, businesses and industry associations, regional and national VPOs, suppliers, students and the local community, and international innovation hubs. Each of these groups contributes to the overall success of EDIH CASSOVIUM and influences its strategies, values and outcomes.

In this context, it is important to explore the unique relationships and expectations of these stakeholders, as well as the value that EDIH CASSOVIUM brings to the community. The joint efforts and synergistic collaboration of all stakeholders are driving the initiative forward, contributing to the sustainable development of the region, and forming a strong foundation for future digital innovation and growth.

Table 4 - Stakeholders EDIH CASSOVIUM

#	Name	Description	Form of dialogue
1	Funders (EC, MIRRI SR)	Provide financial resources for the project	Regular high-level meetings, ongoing communication through reports and project presentations
2	Consortium partners (TUKE, UPJS, KEITVA)	Bring research and education capacity and ecosystem expertise	Workshops on expert topics, regular discussions on trends in research, education, innovation and ecosystem support
3	EDIH CASSOVIUM team members	Manage and implement EDCASS projects	Internal strategy planning meetings, internal meetings to share feedback on project solutions
4	Businesses, industry and professional associations	They are the main industrial partners of the project	Forums for entrepreneurs to share experiences, business innovation working groups, joint workshops
5	International innovation initiatives and organisations	They bring an international perspective and opportunities for cooperation	International innovation conferences and workshops, virtual meetings and webinars, international research and innovation projects

4.2 Structure of EDCASS

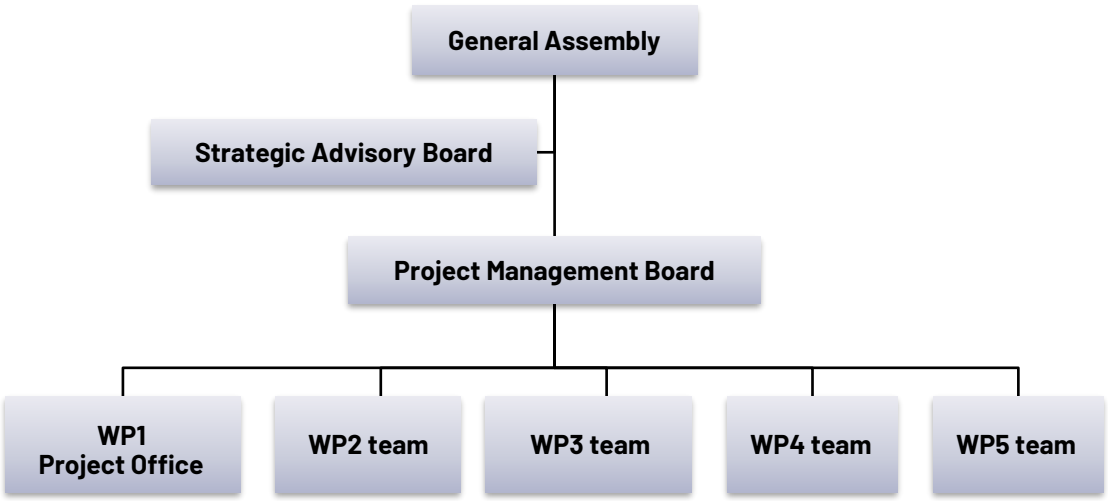


Image 3 - EDIH CASSOVIUM structure diagram

4.2.1 General Assembly

The decision-making body of the Consortium, whose competence is regulated by the Consortium Agreement and the Statutes of the Project Management Board.

It meets at least once a year and decides on:

- The composition of the consortium,
- Major changes to the project,
- The composition and terms of reference of the other bodies of the Consortium.

The General Assembly of EDIH CASSOVIUM has 4 members:

- Rector of TUKE
- Rector of UPJS
- KEITVA Executive Director
- General Project Manager

4.2.2 Strategic Advisory Board

Strategic Advisory Board (SAB) as a monitoring and advisory body responsible for providing external feedback on project implementation. It reviews project progress reports (assessment of project progress and linkages to the innovation ecosystem) and will be composed of representatives of the regional innovation ecosystem (public authorities, other innovation initiatives). The SAB will meet at least once a year (due at the time of the annual action plan and project progress report).

The SAB's remit is regulated by the Consortium Agreement and the Statutes of the Board. Members of the SAB can be: representatives of the regional innovation ecosystem (public authorities, other innovation initiatives, etc.) - e.g. Košice Self-Governing Region, Prešov Self-Governing Region, City of Košice, City of Prešov, Slovak Chamber of Commerce and Industry, etc., as well as key players in the field of digital transformation and innovation at the regional/national level. The members of the Corps are nominated and approved by the General Assembly. The number depends on the need and requirements of the Consortium partners. Each SAP member signs a Non-disclosure Agreement (NDA), based on the requirement of the Consortium Agreement.

4.2.3 Project Management Board

The Project Management Board (PMB) is the executive management body and is responsible for high-level management and coordination within the project (approving key documents, major events and resolving major issues and deviations from the work plan):

- Operational management of project implementation
- Monitoring implementation
- Suggestions for modification of the project plan

The competence of the Council is regulated by the Consortium Agreement and the Statutes of the Project Management Board. It shall meet at least once a month

The PMB consists of 8 members:

- General Project Manager
- Partner Lead TUKE
- Partner Lead UPJS
- Partner Lead KEITVA
- WP2 leader
- WP3 leader
- WP4 leader
- WP5 leader

4.2.4 Operational management via WP

Project activities are structured in WP. Each WP is assigned a WP leader (one of the partners). Each task is supervised by the respective partner and all partners are involved (participate) in all tasks.

The project office (WP1) will consist of a project manager, a finance manager, 3 operations assistants and 2 lead partners. It will be responsible for the day-to-day operation of the project, coordination and information flow.
The four teams of each WP (WP2 - WP5) will consist of a specific WP leader and a working group. The WP leaders will be responsible for the smooth implementation and coordination of the respective WP and its tasks. The WP will consist of experts working on the tasks assigned. The tasks will be led by the WP leader

4.3 Description of work packages

In the pilot phase, the project will implement the operation of the EDCASS structure consisting of 5 Work Packages. After this pilot phase, the activities in each WP will be reviewed.

4.3.1 Work package WP1

Project management focuses on ensuring effective coordination and collaboration within the consortium, including communication flows towards the planned outputs, outcomes, results and impacts of the project. It also includes monitoring progress and, where necessary, implementing corrective actions. Coordination and communication with the Digital Transformation Accelerator (DTA) and the European Commission (EC) is an important part of the WP. WP1 creates an efficient and working environment and space for other WPs of the project.

T1.1 Project management
T1.2 Coordination and communication with authorities
T1.3 Collaboration with DTA (Digital Transformation Accelerator)
T1.4 Risk management

4.3.2 Work package WP2

The EDCASS institutional design, service portfolio development and sustainability strategy proposes a functional business model for EDCASS (organisational and management structure, process models and operational strategies). In addition, the design of the service portfolio and its components (including the customer journey approach, service delivery model, lifecycle and product and resource management) will be carried out in this WP. The design activities in the inception phase of the WP will later be followed by monitoring and evaluation (of the EDCASS pilot and service delivery) and updating and further development of the service portfolio. The WP lifecycle will conclude with activities aimed at defining a sustainability strategy that will outline the operation of EDCASS beyond the project timeframe.

T2.1 Organisational and management structure of EDCASS
T2.2 EDCASS operational model
T2.3 Service portfolio design
T2.4 Evaluation of the pilot operation
T2.5 Sustainability strategy

4.3.3 Work package WP3

The EDCASS Pilot - Provision of Value Added Services is the core of the WP project and will include all EDCASS services provided to customers. Using the models and processes proposed in WP2, WP3 will launch the EDCASS structure and start delivering services (in the four EDIH service categories: A, B, C.D). WP3 will also provide monitoring and evaluation data to WP2 to assess and validate the pilot operation.

T3.1 Piloting the EDCASS structure
T3.2 Provision of value-added services to customers

4.3.4 Work package WP4

Networking and ecosystem capacity building, internationalisation and corridor collaboration enrich the project ecosystem in three main dimensions: 1) Enhancing the capabilities and service portfolio of EDCASS through the activities of the EDIH network and specific EDIH corridors and sub-networks and through bilateral cooperation with partner EDIHs and relevant institutions. The above approach to capacity and service development/building will be based on mutually beneficial relationships (W2W)

between the participants in these network connections; 2) EDCASS will benefit from capacity building of the regional innovation ecosystem (service provision will be in line with the needs and capabilities of the region); 3) WP4 will ensure a seamless service to its customers, linked to the activities of other European network (such as EEN, Startup Europe and EIT).

- T4.1 Capacity building of the regional innovation ecosystem
- T4.2 Building EDIH corridors, cooperation in the EDIH network and other European networks

4.3.5 Work package WP5

Dissemination and communication will position EDCASS as a leader and major driver of digital transformation in the region. It will create and strengthen the visibility of the EDCASS and EDIH network in the region and disseminate the success and benefits of the project implementation. An important part of WP5 will be to focus on marketing and promotion of services aimed at attracting customers for EDCASS services. WP5 will also serve as an "evangelization" forum to raise awareness among the business community, public institutions, policy makers and the public in general on the topics of digital transformation of the economy and society (challenges, trends, opportunities, threats, etc.).

- T5.1 Dissemination and communication plan
- T5.2 EDCASS Branding
- T5.3 Improving EDCASS visibility, promoting successes and building awareness of digital transformation in the region
- T5.4 Promotion of services and soliciting customer feedback

4.4 Relationships between WPs within the project

WPs are interconnected and there are clear information paths and interfaces set up. The core of the project is WP3, where all service delivery takes place. WP3 combines the EDCASS operational model with a developed portfolio of services using the available infrastructure of the consortium.

WP2 and WP4 are the main design and enhancement tools of the project, while in WP2 the whole EDCASS structure and portfolio is being developed. The design builds on the current maturity of the project partners and their experience, integrates all this and creates a structure that will be flexible, scalable and reflect all the requirements and features of a fully functional regional EDIH. WP4, on the other hand, opens up EDCASS to other EDIHs, the thematic network and the overall EDIH network. This WP plays a key role in bringing additional capacity to EDCASS and its customers through EDIH corridors.

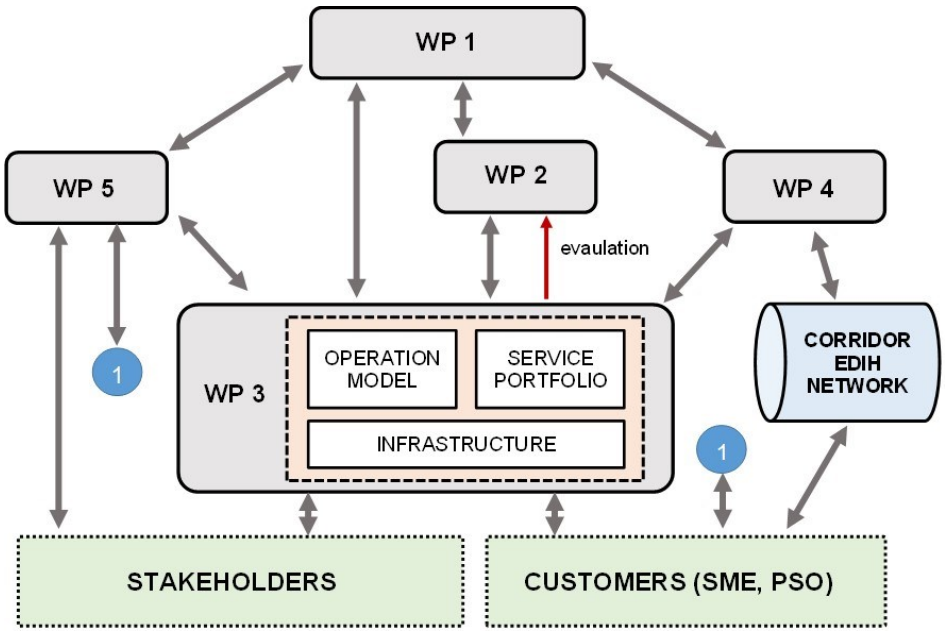


Image 4 - WP relationships within the project

WP1 and WP5 are "service" packages, they support and create an efficient project environment to perform the critical functions of EDCASS. WP1 also deals with linking to project authorities. WP5 uses dissemination and communication tools to reach out to potential customers, stakeholders and the community.

4.4.1 WP distribution among partners

The project activities are structured in WPs, with each WP assigned a leader. Each task is supervised by the respective partner and all partners are involved (participate) in all tasks.

Assignment of WP leadership and supervision of tasks was made based on partners' expertise and previous experience.

Table 5 - WP as an agenda for each partner

TUKE	**WP1**	Project management
	WP2	EDCASS institutional plan, service portfolio development and sustainability strategy
UPJS	**WP3**	Pilot operation of EDCASS - providing value-added services
	WP4	Ecosystem capacity building, internationalisation and corridor collaboration
KEITVA	**WP5**	Dissemination and communication;

4.5 Key project resources

In general, a project is defined as a unique, temporary, multi-disciplinary, and organized effort to produce agreed-upon deliverables within specified requirements and constraints. A prerequisite for the successful implementation of a project is the availability of the necessary resources and their effective management and use.

Project resources can be divided into the following types:

- **Human resources** - made up of staff, team members and experts of the partners involved in the project. The qualifications, experience and skills of these individuals can significantly influence the progress and results of the project.
- **Physical resources** - consists of physical objects, equipment, tools, technologies, technical equipment of employees, including software, which are related to the implementation of the project.
- **Financial resources** - represents the finances necessary to provide the necessary human, material and intangible resources required for the implementation of the project. Important aspects of financial resources are their required amount (project budget) and the source of financing used (financing from revenues generated by the project, loan, grant, etc.).
- **Intangible resources** - include:
  - the knowledge and skills of team members, which are closely intertwined with human resources,
  - information resources, including data and information needed for project planning and management. This includes access to relevant information and data analysis tools.
  - communication resources in the form of effective communication, which is conditioned by the choice of appropriate communication tools and channels, the team's ability to communicate and a communication plan,
  - Time as a key resource for any project. Its effective use is determined by proper planning. Schedules and time management tools are key factors for achieving goals on time,
  - the relationship of the organisation's senior management to the project and the support given to the project by senior management,
  - Stakeholder support when the project affects or is affected by other parties (stakeholders). Their support and cooperation with the project team can have a significant impact on the success of the project.

In the case of EDIH CASSOVIUM, the key resources of the project can be defined as follows:

- **human resources**
  - partners' staff active in the project, included in the project's organisational structure; and
  - employees of the partners' workplaces directly responsible for the implementation of the service for the client (experts for individual services),
- **material resources**
  - specialist workplaces and laboratories,
  - instrumentation of professional workplaces and laboratories,
  - lecture rooms,
  - ICT equipment for staff,
  - specialised software,
- **financial resources**
  - sources of funding for EDIH CASSOVIUM activities (project budget),
- **intangible resources**
  - the knowledge and skills of all human resources as defined in point (a),
  - data collected and used for the purposes of and in the implementation of services,
  - the communication channels and communication tools used within the work packages and in the context of the services provided (in particular in the context of the investment sourcing support and networking functions),
  - internal culture at partners, support from management,
  - Relationships with potential clients, other EDIHs, the EC, MIRRI SR and key players and other partners within the innovation ecosystem.

The following table shows the importance of the different project resources for the different groups of services provided by EDIH CASSOVIUM.

Table 6 - Importance of project resources for each EDIH CASSOVIUM service group

project resources	EDIH service groups			
	Group A	Group B	Group C	Group D
human resources	high	high	high	high
knowledge and skills	high	high	high	high
Time	high	high	high	high
senior management support	high	Medium	high	high
stakeholder support	Medium	Medium	high	high
facilities (e.g. laboratories, lecture rooms)	high	high	Low	Medium
equipment and technology (laboratory equipment, etc.)	high	Medium	Low	Low
staff equipment	Medium	Medium	Medium	Medium
Software	high	Medium	Low	Low
financial resources	high	Medium	Low	Medium
information resources	Medium	Medium	high	high
communication resources	Low	high	high	high

4.6 Customer segments

The definition of customer segments is an integral part of the EDIH CASSOVIUM strategy. Customer segmentation focuses on groups of individuals and organisations with similar needs, characteristics and behaviours. The aim is to effectively identify, understand and define these segments, which creates the prerequisites for a targeted approach to customers. In this context, it is important to highlight the specific criteria that are typical of EDIH CASSOVIUM's customer segments.

Customer segments for EDIH CASSOVIUM are not just abstract categories; they are a key element for successfully meeting goals and achieving positive results in digital innovation. Identifying and understanding the needs of customer segments provides a concrete framework for creating and adapting strategies and delivering value, increasing the chances of project success.

Customer segmentation provides EDIH CASSOVIUM with several competitive advantages:

- **Targeted approach to needs**
  Identifying customer segments allows you to precisely target specific needs. The consortium can tailor its services and products to respond effectively to the specific challenges and expectations of individual customer groups.

- **Personalised solutions**
  By clearly defining customer segments, personalized solutions can be provided. This means not only delivering one-size-fits-all services, but also tailoring specific programs and support services to the needs of individual segments.
- **Optimisation of resources**
  Identification of customer segments enables more efficient use of resources. The consortium can pay more attention and direct investments to the areas that are most critical to those segments, thereby maximizing the value of the outputs and the efficiency of the project.
- **Increasing loyalty and satisfaction**
  A personalized approach to customer segments creates a greater likelihood of loyalty and satisfaction growth. Customers value the individual approach and feel better understood, which ultimately strengthens their relationship with EDIH CASSOVIUM.
- **Agile response to change**
  Changes in the market and in society are common. With a precise definition of customer segments, the consortium is able to react quickly and agilely to new trends, changing needs and the dynamics of the digital environment.
- **Promoting innovation**
  Each customer segment can create room for new innovation opportunities. Identifying these opportunities within each segment allows the development or introduction of new services, technologies and solutions to be precisely targeted.

Ultimately, customer segments are more than just an analytical tool; they are a key element in creating value for customers and enhancing the success of the EDIH CASSOVIUM project. When identifying appropriate customer segments, the following parameters should be taken into account:

A-Size of the enterprise:

Small and medium-sized enterprises - focus on supporting small and medium-sized enterprises, which form an important pillar of the economy.

For the purpose of defining SMEs, three criteria are used:

- number of employees,
- annual turnover and
- the total annual balance sheet amount.

The category of micro, small and medium-sized enterprises is made up of enterprises which

- employ fewer than 250 employees and at the same time
- either have an annual turnover not exceeding € 50 million, or
- a total annual balance sheet not exceeding € 43 million.

Micro-enterprises are defined as enterprises which employ fewer than 10 persons and whose annual turnover or annual balance sheet total does not exceed € 2 million.

Small enterprises are defined as enterprises which employ fewer than 50 persons and whose annual turnover or annual balance sheet total does not exceed € 10 million.

Medium-sized enterprises are defined as enterprises which employ fewer than 250 persons and whose annual turnover or annual balance sheet total does not exceed € 50 million.

Start-ups - support for companies with compulsory capital formation, established in the Slovak Republic, which have not been established for more than 36 months and which are controlled by natural persons who are their founders and are an innovative enterprise, micro, small or medium-sized enterprise.

Public sector organisations - working with the public sector to promote digital innovation and more effective citizen service solutions. Public administration organisations (entities) are legal entities registered in the statistical register of organisations that are classified in the public administration sector in accordance with the European methodology ESA 2010 established by Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union.

B-Economic activity or business area

Segmentation based on the statistical classification of economic activities SK NACE, which identifies economic activities in terms of the occurrence of target types of enterprises targeted by EDIH CASSOVIUM (SMEs, startup, PSO) and identification of areas that have the potential to benefit from the services provided by EDIH CASSOVIUM.

When selecting the target types of undertakings in terms of business area, account should be taken of Article 1(1)(a) to (f) of Commission Regulation No 2023/2831 of 13 December 2023 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid. According to this Article, the Regulation applies to aid granted to undertakings in all sectors, with the exception of

- aid granted to undertakings active in the primary production of fishery and aquaculture products;
- aid granted to undertakings active in the processing and marketing of fishery and aquaculture products, where the amount of aid is fixed on the basis of the price or quantity of the products purchased or put on the market;
- aid granted to undertakings active in the primary production of agricultural products;
- aid granted to undertakings active in the processing and marketing of agricultural products, in one of the following cases:
    - where the amount of aid is fixed on the basis of the price or quantity of such products purchased from primary producers or marketed by the undertakings concerned;
    - where the aid is conditional on being partly or wholly passed on to primary producers;
- aid granted for export-related activities to third countries or Member States, namely aid directly linked to the quantities exported, aid for the establishment and operation of a distribution system or for other current expenditure linked to the export activity;
- aid that is conditional on the use of domestic over imported products and services.

The following table lists the economic activities broken down by SK NACE. Each activity is associated with the potential for EDIH CASSOVIUM to provide services to entities operating in that economic area.

A 'yes' entry means that there is a potential for service provision for the economic activity and type of business. A 'no' entry means that there is no service potential for the economic activity and type of business. n/a means that there is no potential for that type of business in that economic activity.

Table 7 - Service potential by economic activity (SK NACE)

SK NACE code (section /division)	division - name	the potential of using EDIH services		
		MSP	start-up	PSO
A - AGRICULTURE, FORESTRY AND FISHING				
A01	Crop and animal production, hunting and related services	Yes	Yes	Yes
A02	Forestry and logging	Yes	n/a	Yes
B - MINING AND QUARRYING				
B05	Coal and lignite mining	n/a	n/a	n/a
B06	Extraction of oil and gas	n/a	n/a	n/a
B07	Mining of metal ores	n/a	n/a	n/a
B08	Other mining and quarrying	n/a	n/a	n/a
B09	Auxiliary activities in mining	n/a	n/a	n/a
C - INDUSTRIAL PRODUCTION				
C10	Food production	Yes	Yes	n/a
C11	Beverage production	Yes	Yes	n/a
C12	Manufacture of tobacco products	n/a	n/a	n/a
C13	Manufacture of textiles	Yes	Yes	n/a
C14	Manufacture of clothing	Yes	Yes	n/a
C15	Manufacture of leather and leather products	Yes	Yes	n/a
C16	Wood processing and manufacture of wood and cork products except furniture; manufacture of articles	Yes	Yes	n/a
C17	Manufacture of paper and paper products	n/a	n/a	n/a
C18	Printing and reproduction of recording media	Yes	Yes	n/a
C19	Manufacture of coke and refined petroleum products	n/a	n/a	n/a
C20	Manufacture of chemicals and chemical products	Yes	No	n/a
C21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	Yes	No	n/a
C22	Manufacture of rubber and plastic products	Yes	No	n/a
C23	Manufacture of other non-metallic mineral products	Yes	No	n/a
C24	Production and processing of metals	Yes	No	n/a
C25	Manufacture of metal structures, except machinery and equipment	Yes	Yes	n/a
C26	Manufacture of computer, electronic and optical products	Yes	Yes	n/a
C27	Manufacture of electrical equipment	Yes	Yes	n/a
C28	Manufacture of machinery and equipment n.e.c.	Yes	Yes	n/a
C29	Manufacture of motor vehicles, semi-trailers and trailers	Yes	Yes	n/a
C30	Manufacture of other transport equipment	Yes	Yes	n/a
C31	Furniture production	Yes	Yes	n/a
C32	Other production	Yes	Yes	n/a
C33	Repair and installation of machinery and apparatus	Yes	n/a	Yes
D - SUPPLY OF ELECTRICITY, GAS, STEAM AND COLD AIR				
D35	Electricity, gas, steam and cold air supply	Yes	Yes	n/a
E - WATER SUPPLY; SEWAGE TREATMENT AND DISPOSAL, WASTE AND WASTE DISPOSAL SERVICES				
E36	Water collection, treatment and supply	Yes	n/a	Yes
E37	Wastewater treatment and disposal	Yes	n/a	Yes
E38	Collection, treatment and disposal of waste; recycling of materials	Yes	Yes	Yes
E39	Remediation activities and other waste management activities	Yes	Yes	Yes
F - CONSTRUCTION				
F41	Construction of buildings	Yes	n/a	n/a

SK NACE code (section /division)	division - name	the potential of using EDIH services		
		MSP	start-up	PSO
F42	Engineering constructions	Yes	n/a	n/a
F43	Specialised construction work	Yes	n/a	n/a
G - WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES				
G45	Wholesale and retail trade and repair of motor vehicles and motorcycles	Yes	n/a	n/a
G46	Wholesale trade, except of motor vehicles and motorcycles	Yes	n/a	n/a
G47	Retail trade, except of motor vehicles and motorcycles	Yes	n/a	n/a
H - TRANSPORT AND STORAGE				
H49	Overland and pipeline transport	Yes	n/a	Yes
H50	Water transport	Yes	n/a	n/a
H51	Air transport	Yes	n/a	n/a
H52	Warehousing and auxiliary activities in transport	Yes	n/a	n/a
H53	Postal and courier services	Yes	n/a	n/a
I - ACCOMMODATION AND CATERING SERVICES				
I55	Accommodation	Yes	n/a	Yes
I56	Activities of restaurants and pubs	Yes	n/a	Yes
J - INFORMATION AND COMMUNICATION				
J58	Publishing activities	Yes	n/a	Yes
J59	Production of films, videos and television programmes, preparation and publication of sound recordings	Yes	n/a	Yes
J60	Activities for radio and television broadcasting	Yes	n/a	Yes
J61	Telecommunications	Yes	n/a	Yes
J62	Computer programming, consulting and related services	Yes	Yes	Yes
J63	Information services	Yes	Yes	Yes
K - FINANCIAL AND INSURANCE ACTIVITIES				
K64	Financial services, except insurance and pension funding	No	n/a	n/a
K65	Insurance, reinsurance and pensions other than compulsory social insurance	No	n/a	n/a
K66	Activities auxiliary to financial services and insurance	No	n/a	n/a
L - ACTIVITIES IN THE FIELD OF REAL ESTATE				
L68	Real estate activities	n/a	n/a	n/a
M - PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES				
M69	Legal and accounting activities	No	n/a	n/a
M70	Business management; management consultancy	No	No	n/a
M71	Architectural and engineering activities; technical testing and analysis	Yes	n/a	n/a
M72	Scientific research and development	Yes	Yes	Yes
M73	Advertising and market research	n/a	Yes	n/a
M74	Other professional, scientific and technical activities	Yes	Yes	Yes
M75	Veterinary activities	No	n/a	n/a
N - ADMINISTRATIVE AND SUPPORT SERVICES				
N77	Renting and leasing	No	n/a	n/a
N78	Mediation of work	Yes	n/a	Yes
N79	Activities of travel agencies, travel agency reservation services and related activities	Yes	n/a	n/a
N80	Security and search services	Yes	n/a	Yes
N81	Facilities maintenance and landscaping activities	Yes	n/a	Yes
N82	Administrative, clerical and other business support activities	No	n/a	No
O - PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY				

SK NACE code (section /division)	division - name	the potential of using EDIH services		
		MSP	start-up	PSO
O84	Public administration and defence; compulsory social security	n/a	n/a	Yes
P - EDUCATION				
P85	Education	Yes	n/(a	Yes
Q - HEALTH AND SOCIAL ASSISTANCE				
Q86	Healthcare	Yes	n/a	Yes
Q87	Residential care (residential care)	Yes	n/a	Yes
Q88	Social work without accommodation	Yes	n/a	Yes
R - ARTS, ENTERTAINMENT AND RECREATION				
R90	Creative, artistic and entertainment activities	No	n/a	Yes
R91	Activities of libraries, archives, museums and other cultural institutions	n/a	n/a	Yes
R92	Gaming and betting activities	Yes	n/a	No
R93	Sports, entertainment and recreational activities	Yes	n/a	Yes

C-Method of decision-making:

- **Innovative approach -** support for actors with the ability to bring new and original ideas, improving competitiveness through the implementation of digital technologies.
- **Decision-making flexibility** - the ability to respond quickly and flexibly to changing conditions and new information.
- **Price flexibility - the** ability to adjust the price of products or services depending on market conditions.
- **Rapid adaptability to market demands - the** ability to respond quickly to changes in customer needs or preferences.
- **Individual approach to the customer -** providing a personalized service according to customer needs.
- **Lower overhead ratios -** focus on efficiency and competitiveness with lower operating costs.

D-Geographical delimitation

In terms of the scope of clients, the target area of EDIH CASSOVIUM is geographically defined as "Eastern Slovakia" (Košice and Prešov regions).

An entity that already meets parameter A, i.e. ideally is a small or medium-sized enterprise, start-up or public administration organisation, and at the same time has the ambition or potential to meet parameter C, i.e. innovative approach, flexibility of decision-making, price flexibility, quick adaptability to market requirements, individual approach to the customer and lower share of overheads, operates, respectively. The client has its registered office in the Košice or Prešov region and at the same time performs economic activity in one of the areas where EDIH CASSOVIUM can provide its

services, it represents an ideal client for EDIH CASSOVIUM. This entity can effectively use the services and support provided by EDIH CASSOVIUM in its journey towards digital transformation and innovation.

Taking customer segments into account is a necessary part of targeted marketing and information campaigns and enables the tailoring of products and services to the needs of specific customer segments.

According to FinStat data, it operates in the Košice and Prešov regions:

- 39 031 companies with fewer than 10 employees and an annual turnover of less than € 2 million - micro-enterprises,
- 2 627 companies with 10 to 49 employees (inclusive) and an annual turnover of less than €10 million - small enterprises and
- 504 companies with between 50 and 249 employees (inclusive) and an annual turnover of less than € 50 million - medium-sized enterprises.

4.6.1 Segmentation of clients according to their knowledge of the existence of EDIH CASSOVIUM

In addition to the above approach to segmentation, clients or potential clients of EDIH CASSOVIUM can be divided into four groups according to their knowledge of the existence of EDIH CASSOVIUM (and its services) and their interest in using these services. These four groups of clients are divided into four quadrants in Figure 4.

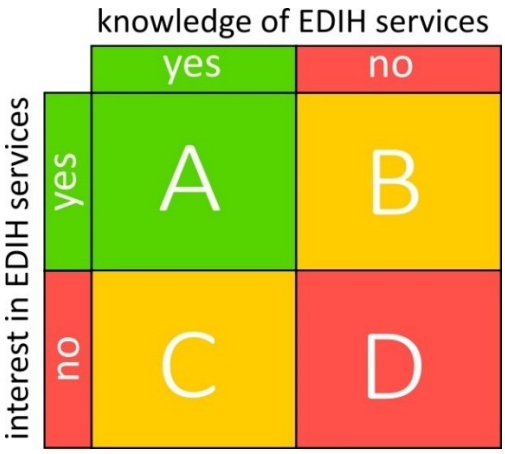


Image 5 - Distribution of clients by awareness of EDIH and interest in services

The aim is to get as many potential clients as possible to be in **quadrant A**, i.e. to be aware of the existence of EDIH CASSOVIUM and the services it provides, and at the same time to be interested in the provision of these services. A client located in quadrant A either has direct contact with EDIH CASSOVIUM partners or has been "hit"

by EDIH CASSOVIUM promotional activities, and at the same time has knowledge of his/her own tasks and pains (pains) related to his/her activities and the gains (gains) he/she would like to achieve. These customers should form the bulk of the clients in the initial phase of EDIH service provision.

A client in **quadrant B** would be interested in the services provided by EDIH CASSOVIUM, but has no knowledge of the existence of EDIH CASSOVIUM or the services it provides. This client has knowledge of his/her own tasks and pains (pains) that are related to his/her activities and the gains (gains) that he/she would like to achieve. In order to move this type of client into quadrant A, it is necessary to adjust the promotion of EDIH CASSOVIUM so that it reaches the widest possible range of clients. These clients should be targeted by ongoing 'mass' promotion of EDIH CASSOVIUM services to reinforce awareness of the existence of EDIH CASSOVIUM.

The client in **quadrant C** is aware of the existence of EDIH CASSOVIUM and the services it provides, but is not interested in these services. This is a client who is unaware of his/her own tasks, pains (pains) that are related to his/her activities and/or gains (gains) that he/she could achieve. In order to move this type of client into quadrant A, it is necessary to identify their tasks and pains, offer them appropriate services from the EDIH CASSOVIUM portfolio and convince the client that these services will contribute to the fulfilment of their tasks and the elimination of their pains, which requires an individual approach and close interaction with the client. These clients need to be reached with targeted communication of EDIH CASSOVIUM's achievements.

The client in **quadrant D** is not aware of the existence of EDIH CASSOVIUM or of the services it provides and is not interested in these or similar services. This is a client who has not been "affected" by EDIH CASSOVIUM's promotional activities and is not aware of the challenges (tasks), pains (pains) that are related to his/her activities and/or gains (gains) that he/she could achieve. In order to move this type of client into quadrant A, it is necessary to set up EDIH CASSOVIUM promotions to reach this type of client and at the same time to identify his/her tasks and pains, to offer him/her appropriate services from the EDIH CASSOVIUM portfolio and to convince the client that these services will contribute to the fulfilment of his/her tasks and the elimination of his/her pains. An individual approach and close interaction are needed to win these clients. This approach should be applied to clients who can make a particular contribution to EDIH CASSOVIUM's activities (operating in a specific sector, having a specific position within the sector or providing a unique product).

EDIH CASSOVIUM clients can also be divided into groups according to the following criteria:

- According to **eligibility to use** EDIH CASSOVIUM **services**:
  - eligible entities and
  - entities that do not qualify.
- According to the **services** they are interested in:
  - entities interested in providing one service and
  - entities interested in providing a combination of services.
- According to the **nature of the activity**:
  - business entities and
  - public administration organisations.
- By **size**:
  - microenterprises,
  - small businesses and
  - medium-sized enterprises.
- By **sector or business area**:
  - services,
  - agricultural activity,
  - Industry.
- According to the **industry in which they operate**:
  - Engineering, Food, Chemical industry, Metallurgy, Energy, etc.
- According to the **success rate of the business**:
  - extremely successful businesses,
  - functioning businesses,
  - businesses in crisis.

Client segmentation must respond to the portfolio of services offered by EDIH CASSOVIUM and to the conditions that potential EDIH CASSOVIUM clients must meet before the service can be provided to them.

5 EDIH CASSOVIUM OPERATIONS

5.1 WP1: Project management, administration and finance

5.1.1 Project management

EDCASS will use strategic planning to ensure quality and transparency based on an overall strategic plan with an annual planning period. Strategic planning provides management and key stakeholders with timely information on the progress of the project in achieving results.

The following management tools will be used for the project:

- **A tiered approach to the project management structure** - the project management structure will implement three interrelated levels of management (consultative, strategic, operational - see section 2.3, "Consortium management risk and decision making" for more information), with clear definition of responsibilities, communication flow, interfaces and processes. The project office in WP1 will be responsible for their implementation in the project.
- **Work package leadership** - the WP leader is responsible for the organization of work and communication in his particular WP. Communication in work teams and between WPs is based on an operational and efficient level, minimising administrative processes and focusing on a targeted approach. Teamwork and joint planning with effective use of digital technologies will be the main collaboration tools used in the daily project work.
- **Reporting** - the reporting period is set at 12 months (1 year) with a backward cycle of an annual work plan (beginning of the period) and an annual progress report (end of the period). A bottom-up approach will be used to collect monitoring information from all work groups (including work progress in terms of outputs, outcomes, outcomes, impacts and workforce). This information will be summarised in WP1.
- **System support of management processes** - in the initial phase of the project, a suitable IT system will be implemented with the ambition to systematize the information and process flow in a digital way. The system will also serve as a CRM system to monitor and manage the provision of services to customers. The system will make reporting at different levels of the project easy and accessible.
- **Overall coordination, administration and financial management** is carried out by the Project Office (WP1).

There will be separate planning and management of project finances as part of project management. A financial management plan will be developed in WP1 in the inception phase of the project. The plan will outline the principles and processes of financial management of the project. The General Financial Manager (TUKE) will be responsible for the overall financial planning and management of the project, as well as the financial affairs of TUKE in the project. UPJS and KEITVA will be assigned their own partner financial manager who will be responsible for their financial affairs in the project.

Organisation of activities

According to the current organisational structure of the project, the highest decision-making body of the consortium is the **General Assembly of** the EDIH CASSOVIUM Consortium. According to its statutes, the General Assembly decides on the following areas:

a) substantial changes to the project (changes that require the conclusion of amendments to the consortium agreement or to the agreements referred to in Article 1(2) of the Statutes),
b) the entry of a new partner into the consortium and the approval of an agreement on the terms of its entry,
c) the withdrawal of a partner from the consortium and the approval of an agreement on the terms of such withdrawal,
d) Identification of breaches of the obligations and commitments of the Partner, within the meaning of the contracts referred to in Article 1, point 2 of this Statute,
e) declaration of a partner as a Defaulting Party,
f) remedies to be taken by the defaulting partner,
g) termination of the defaulting partner's participation in the project and related measures,
h) a proposal to change the project coordinator,
i) a proposal by the project funding authorities to suspend all or part of the project,
j) a proposal from the project funding authorities for the termination of the project and the subsequent termination of the consortium agreement,
k) the composition of the Project Management Board,
l) the composition of the Strategic Advisory Board,
m) the statutes and amendments thereto of all consortium bodies (General Assembly, Project Steering Board and Strategic Advisory Board).

The General Assembly also notes or approves all proposals submitted by the Project Steering Board and the Strategic Advisory Board.

The General Assembly shall have four members: representatives of each Contracting Party and the General Manager of the project. A list of the members of the General Assembly shall be maintained by the Project Office (WP1).

The General Assembly shall be convened by the General Manager of the project as follows:

a) Ordinary meetings: at least once a year in accordance with the approved schedule of general meetings,
b) Extraordinary meeting: at any time at the request of any member of the General Assembly.

According to the Statute of the **Strategic Advisory Board** (hereinafter referred to as the Board), the Board is the monitoring and advisory body of the project. The Board is responsible for monitoring, providing external feedback on the implementation of the project, evaluating its progress and linking the project to the regional innovation ecosystem.

The Board shall be composed of members nominated and approved by the General Assembly. The members of the Board are representatives of the regional innovation ecosystem (public authorities, other innovation initiatives, etc.), key players in the field of digital transformation and innovation at regional/national level.

Meetings of the Branch shall be convened by the General Manager of the Project at least once a year, in accordance with the approved plan of meetings of the Branch.

The Project Management Board is the coordinating body of the consortium. According to the Statutes of the Project Management Board (hereinafter referred to as the "Board"), the Board is responsible for

a) Tactical and operational management and coordination of the project, in particular for approving deliverables and milestones, key documents, procedures and events, major events,
b) monitoring project implementation, ongoing (active) risk management, addressing critical issues and deviations from the project plan, evaluating project progress, assessing project implementation compliance with the plan and, if necessary, proposing adjustments to the project plan for approval by the General Assembly,
c) for the preparation of the meetings of the General Assembly and for the proper execution and implementation of its decisions.

The board shall be composed of 8 members:

1. General Manager of the project (as WP1 leader),
2. Partner Lead for TUKE partner,
3. Partner Lead for UPJS partner,
4. Partner Lead for partner KEITVA,
5. WP2 work package leader,
6. WP3 work package leader,
7. WP4 work package leader and
8. WP5 work package leader.

Board meetings shall be convened by the General Manager of the project as follows:

a) Ordinary meeting: at least once a month, in accordance with the approved schedule of meetings of the Board,
b) Extraordinary meeting: at any time at the request of any member of the Board.

In order to bring the management of the EDIH CASSOVIUM project closer to standard project management, the following organisational structure has been proposed.

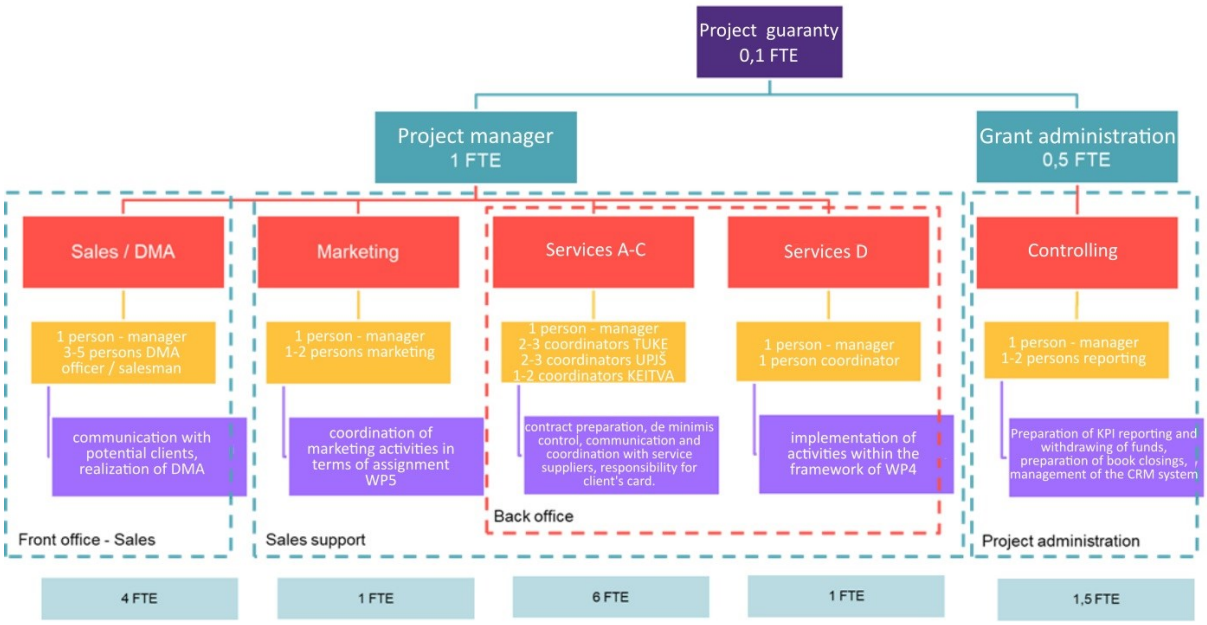


Image 6 - Proposed project team structure

The numbers of FTEs indicated in the draft organisational structure are based on the complexity of the individual activities. During the course of the project, it is necessary to continuously evaluate the actual intensity of the activities and, if necessary, to adjust the FTE numbers so that the individual activities can be carried out efficiently. In order to make the project as efficient as possible, it is necessary to ensure that the individual FTEs are not spread over a large number of persons.

Job descriptions of individual positions in the project organisational structure

Sales/DMA

The main objective of the Sales/DMA arm is to acquire new customers, maintain relationships with existing customers, raise awareness of EDIH CASSOVIUM and achieve project objectives. According to the organizational structure, Sales/DMA can also be defined as the Front Office, which is one of the main visible parts of the project and the main communication channel to the customers.

This project branch includes the following positions:

- **Coordinator**
  - coordinates meetings between DMA officers and the customer,
  - is the main point of contact for customers interested in EDIH CASSOVIUM services until the contract is moved to the coordinator for each provider,
  - Communicates with the customer as directed by the DMA Officers,
  - updates the customer database with the data under its responsibility,
  - coordinates the completion of the DMA according to the prescribed rules,
  - sends and coordinates the satisfaction survey process,
  - works closely with other coordinators from other branches of the project organisation.
- **DMA Officer/Salesman**
  - conducts meetings with customers according to established rules,
  - provides assistance in completing the DMA,
  - is one of the contact persons for an existing customer,
  - Builds relationships and actively seeks out new potential customers.

Marketing

The marketing activities in this project can be divided into two parts:

- **Pre-preparation phase** - in this phase the main marketing focus is the preparation of presentation materials and communication schemes for the DMA Officer and for the coordinators who will actively reach out to customers and offer EDIH CASSOVIUM services. All information should be consistent with publicly available information and should be regularly updated.
- **project phase -** according to the outputs from customers obtained from individual sources, such as the process of filling in the DMA, feedback from the customer on the basis of a satisfaction questionnaire, marketing will analyze the data and propose communication steps, forms, target groups, etc.

Services A - C

This arm of the project organisation is responsible for signing the contract and submitting all necessary documents and coordinating the delivery of the service. It also collects information on the progress and duration of service delivery to the customer. It enters all the collected information into the main database. A very important part of the workload is to work closely with service providers and update information on their availability and occupancy.

- **Coordinator for each partner**
  - coordinates the availability calendar of the different specialists responsible for the provision of services,
  - proposes deadlines for the implementation of customer services,
  - is the main communication partner for the customer,
  - follows the life cycle of the contract,
  - updates the customer database with the data under its responsibility,
  - Works closely with the coordinator in the Sales/DMA branch.

D Services

The responsibility of this arm of the project organisation is to work with other EDIHs and establish relationships and also to broker services provided by other EDIHs if EDIH CASSOVIUM does not have the service requested on its list of services. This branch is part of the whole project, but is not linked to any other branch in the work process. It reports the status of these services directly to the project manager. If the information obtained is useful for the purposes of other organizational units, communication should be established in that direction as well.

Project meetings

One of the prerequisites for the success of a project are project meetings, which aim at communication between participants and stakeholders, discussing problems, making proposals and approving or rejecting them. Project meetings create a space for collective decision-making that contributes to the successful implementation of the project, including collective decisions on the planned objectives and on the expected results.

Project meetings are a space for discussing problems and a tool for finding solutions, deciding which path to take within the project, exchanging relevant information and building relationships between participants.

The most important types of project meetings are:

Kick-off meeting (Kick-off)

It is organized at the beginning of the project and is designed to organize each step of the process, as well as to ensure that each stakeholder understands the goals, procedures, and plans. The goal is to set the project objectives and establish the rules for how the project team members will work together. This type of meeting is often associated with the formal start of the team building and training process.

The project manager should have everything planned before the meeting and motivate everyone to actively participate in the implementation of the project.

A typical agenda for this type of meeting includes:

- Introducing the project framework - presenting the main points of the project, such as objectives, budget, time, success criteria and challenges that will need to be faced during the process,
- introduction of team members,
- client introduction, target group, sectors and objectives.

Management structure

- Delegating responsibilities and tasks to project team members and developing procedures to achieve individual goals.

Planning

- Scheduling tasks and milestones; prioritizing activities that best match client goals.

Building trust in the project:

- Create space and time for team members to ask questions and dispel any doubts.

Participants

- **Mandatory:** project manager, project team members
- **Recommended:** project sponsor
- **Voluntary:** governing board, general assembly

Project Steering Committee (Steering Committee)

A Steering Committee is a group of individuals tasked with providing leadership, direction and support in the strategic management of projects, programmes or other initiatives. These committees are often formed at a high level of the organization and include key stakeholders and senior leaders.

The recommended frequency of meetings is 1x per month.

Recommended topics

- Evaluation of KPI performance - it is recommended that the same KPIs are evaluated at each meeting so that changes between periods can be

compared,
- changes in the direction of the project,
- team functioning - recommending, approving changes in the project organization,
- conflict resolution at a higher level of project management (e.g. between project manager and sponsor).

Participants
- **Mandatory:** project manager, project guarantor, grants administrator, governing board
- **Recommended:** general assembly

Project Status Meeting (Status Meeting)

The status meeting is an essential tool to keep the project on track and ensure its success. Its purpose is to systematically track the agenda to verify that everyone is completing their tasks on time and on budget, and to keep the team engaged, participating and informed about the project.

The recommended frequency of meetings is 1 x weekly during the start-up and end of the project, and 2 x weekly after the start-up.

Recommended topics
- Evaluation of KPI performance - it is recommended that the same KPIs are evaluated at each meeting so that changes between periods can be compared,
- team functioning - recommending, approving changes in the project organization,
- communication in the project organisation,
- functioning of processes, their compliance/non-compliance, suggestions for changes based on practice.

Participants
- **Mandatory:** project manager, branch managers
- **Recommended:** other members of the project team

Consultation on contingencies

Although each phase of the project is planned, unforeseen situations may occur during the course of the project. An unforeseen situation may require an adjustment of the plan and a rearrangement of the agenda. Changes during a project are a natural part of any project, but they need to be kept under control.

The Head of Service may, as appropriate, request the Project Manager to convene a

contingency meeting.

Participants

- **Mandatory:** project manager, head of department
- **Recommended:** other members of the project team

Project evaluation meeting (know-how transfer)

It is held at the end of the project to list the strengths and weaknesses of the team, discuss and evaluate the positives and negatives. It will help to improve the performance of the project team during the next project and improve planning skills. The meeting includes a recapitulation and recognition of project achievements.

The preparation of the meeting is carried out on the basis of cooperation between the project guarantor and the project manager.

Recommended topics

- evaluation of KPI performance and comparison with planned KPIs,
- team functioning - highlighting collective cooperation, if possible evaluating (through numbers) the project's achievements,
- communication in a project organisation - what we have learned,
- praise for the performance.

Participants

- **Mandatory:** project guarantor, project manager, project team members
- **Recommended by:** governing board, general assembly, deans of individual faculties
- **Voluntary:** service providers

5.1.2 Funding EDIH CASSOVIUM

The economic side of EDIH CASSOVIUM is a key aspect that shapes its ability to provide innovative digital solutions and support the transformation of businesses in Eastern Slovakia. As an organisation focused on digital development, EDIH CASSOVIUM strives to secure adequate funding to realise its goals and missions.

Sources of funding

- **Digital Europe Programme - 50%:** financial support from the European Commission gives EDIH CASSOVIUM a strong international context and allows the project to integrate the latest digital trends and best practices from the wider European area. The support (project number: 101083466) is provided in the form of a grant under Call No. DIGITAL-2021-EDIH-01.

- **Recovery and Resilience Plan of the Slovak Republic - 50%:** financial support from the Slovak Government through the Recovery and Resilience Plan provides the project with stable domestic funding sources, which will contribute to its sustainability. The Recovery and Resilience Plan funds represent an indirect state aid to the clients provided under the de-minimis scheme DM 16/2022. They are provided under Component 17 (Digital Slovakia), under Call No. 17I03-04-V01 (project number: 17I03-04-V01-00001).

Total budget

A total budget of **2 999 980,40 EUR** shows the robustness and ambition of the project. It takes into account the needs of several initiatives and programmes that EDIH CASSOVIUM plans to implement during the specified period.

Eligible period of expenditure

From 1.2.2023 to 30.6.2026 - this time period determines when the funds can be properly used to implement the project. It is important to monitor and regularly update the expenditure in accordance with the set timetable.

5.1.3 Funding strategy

After the eligibility period of the current EDIH CASSOVIUM resources is over, the strategy will need to focus on identifying and exploiting different sources of funding, including public investment and partnership agreements with industrial and academic partners. In this way, EDIH CASSOVIUM can become a sustainable driver for digital transformation in the region and contribute to the development of the innovation ecosystem.

The funding strategy for the future includes in particular:

- **Diversification of resources**
  Current funding sources are temporary or limited, so it is important to diversify funding sources. EDIH could explore partnership arrangements with businesses, universities, local authorities and other organisations.
- **Support from regional entities**
  Working with local governments and industry partners can provide a steady flow of funding. EDIH should identify the priorities and needs of the region and seek financial support from these entities.
- **Support from businesses**
  Engaging and gaining support from businesses in the region is important. This may include charging for certain services or providing added value to local businesses.
- **Grants and tenders**

Participating in grant programmes and tenders can be a useful way to raise additional funding for specific projects and initiatives. These sources should be targeted.

- **Development of custom revenue models**
  Creating your own revenue models, for example through the provision of paid training, consultancy services or licensing fees for innovative technologies, can be a source of additional income.
- **International cooperation**
  Continuing to seek opportunities for international cooperation, including involvement in European programmes and initiatives, can bring additional sources of funding.
- **Effectiveness and measurability of results**
  Demonstrating effectiveness and achieving measurable results can attract the attention of other financial partners and investors who are willing to support innovative and successful projects.

The financing strategy must take into account the need to ensure the sustainability (in line with the sustainability strategy) of EDIH CASSOVIUM operations beyond the project timeframe in order to maintain the built capacity, skills and collaboration in service delivery to the clients, which will be SMEs and PSO. The basic prerequisite for ensuring the sustainability of the EDIH CASSOVIUM operation is the provision of market-oriented services (services that clients are interested in) at a competitive price (in competition with other entities providing the same or similar services), while the client must perceive the benefit of the service provided.

5.1.4 EDIH budget

The EDIH CASSOVIUM budget reflects the efficient management of funds to achieve maximum impact on businesses and organisations in the region. These funds are allocated to a number of key areas, including supporting innovation projects, delivering training programmes focused on digital transformation and building an innovation ecosystem. Along with public revenues, EDIH CASSOVIUM leverages its partnerships and networking to secure additional sources of funding, which strengthens its ability to implement digital initiatives and support the growth and competitiveness of businesses in the Eastern Slovakia region.

The cost structure of an innovation hub is very similar to that of a consulting firm. Although they are different organizations with specific goals and functions, there are some parallels that can lead to a better understanding of budget management:

- **Personnel costs**
  The largest cost item for a consulting firm is personnel-related costs, including

salaries of employees, professionals and managers. In the case of EDIH, this may include experts in digital transformation, education and innovation.

- **Operating costs**
  Both types of organisations have operational costs associated with day-to-day running, including office costs, technology, energy, communications and so on.
- **Direct project costs**
  Consulting firms typically have costs associated with managing projects, developing solutions and providing consulting services, licensing special software, or subcontracting. Similarly, EDIH CASSOVIUM may have costs associated with implementing innovation projects and providing support to businesses.
- **Research and development costs**
  In the case of EDIH, there can be significant research and development costs for new digital solutions and technologies, which can be comparable to the cost of innovation in consulting firms.
- **Marketing and promotion**
  Both entities may have costs associated with the marketing and promotion of their services and projects. This may include efforts to win clients (in the case of consultancies) or to raise awareness of digital initiatives (in the case of EDIH).
- **Training and skills development**
  Both entities could invest in training and skills development, with consultancies training their staff, while EDIH could provide training programmes for local businesses and individuals.

It is important to note that each organization has its own unique needs and prioritizes its costs in accordance with its goals and strategy. The consulting firm is focused on providing consulting and management services, while EDIH specializes in digital transformation and innovation projects within the broader ecosystem.

The current EDIH CASSOVIUM budget confirms the analogy with a consultancy company.

Table 8 - EDIH CASSOVIUM budget by main cost categories

Cost Category		Allocated Budget (EUR)
A.1	personnel costs	1 048 860
B	subcontracting	60 000
C.1	travel and subsistence	82 500
C.2	equipment	48 760

Cost Category		Allocated Budget (EUR)
C.3	supplies (goods, services)	245 700
D.1	internal invoicing	1 317 900
D.1.1	the direct costs of the services to the workplaces	1 256 400
D.1.2	other internal invoicing (excluding services)	61 500
E	indirect expenditure	196 260
	Together	**2 999 980**

The appropriations are allocated to five work areas (work packages) on the basis of a grant agreement with the EC:

- **WP1** - Project Management - costs related to managing EDIH CASSOVIUM's relationships with resource providers, monitoring, reporting and risk management, etc. The largest share in this area is personnel costs.
- **WP2** - business model development - cost of defining a service portfolio, service delivery management manual, creating a "customer journey", methodology for monitoring and evaluating KPIs, etc. The largest share in this area is personnel costs.
- **WP3** - Pilot operation of EDIH CASSOVIUM - together with WP4, this area is key to fulfilling the mission of EDIH CASSOVIUM. Includes (direct) costs for the provision of value added services This area covers all budget lines.
- **WP4** - Networking and innovation ecosystem - costs associated with organising various networking events and attending conferences, etc. The largest share in this area is staff and travel costs.

5.1.5 Key performance indicators

KPIs (measurable indicators) are binding indicators for the evaluation of EDIH CASSOVIUM activities. They are the objectives to which EDIH CASSOVIUM has committed itself, and their binding nature derives from the terms of the grant agreement under which EDIH CASSOVIUM was set up.

Table 9 - EDIH CASSOVIUM set of measurable indicators (KPIs)

Indicator	Definition	Target value	Responsible WP
Total number of customers served	Total number of customers/MSP/PSO who have received at least 1 service (approximately 400 services will be provided during the project)	150	WP3
Total number of SMEs served		130	WP3
Total number of public sector organisations served		20	WP3
Number of customers in category A (TBI)	Total number of customers in each service category	40	WP3
Number of customers in category B (S&T)		60	WP3
Number of customers in category C		10	WP3

(S2FI)			
Number of customers in category D (IE&N)		40	WP3
Amount of funds raised through services provided	The total amount of external funding (investor funding, grants, etc.) that customers have received as a result of the services provided (especially in category C)	€ 1 million	WP3
Bilateral EDIH corridors	Number of declared links with other EDIHs/thematic networks/other EU networks outside the region and at EU level	30 ties	WP4
Cooperation in EDIH thematic networks		6 ties	WP4
Cooperation with other pan-European networks		2 ties	WP4
Links established at regional and national level	Bilateral/Multilateral links with key players in the regional/national innovation ecosystem (including DIHs, other SK EDIHOs, public institutions, etc.)	10 ties	WP4
Percentage of customers served whose digital maturity has increased		70%	WP3
Number of start-ups/spin-offs served		15 start-ups	WP3

The indicators focusing on the number of customers served are disaggregated according to the type of customer (SME and PSO) and the category of service provided (category A to D), in addition to the individual partners of the project.

Table 10 - Distribution of measurable indicators among EDIH CASSOVIUM partners

	target value	TUKE	UPJS	KEITVA
total number of customers served	150	100	45	5
total number of SMEs served	130	85	40	5
total number of public sector organisations served	20	15	5	0

The KPI targets for the number of customers in terms of time to reach them and their distribution between the different service categories (A, B, C and D) are set very ambitiously. Meeting the KPI targets will depend on intensive efforts to reach potential customers and to coordinate the staffing and technical capacities of the individual service providers.

5.1.6 Identification and estimation of cash flows

Cash flows can be divided into cash flows over time

- before the start of service provision - these are the cash flows (expenditure) associated with the activities to create the conditions for the start of service provision; and
- after the commencement of the provision of services - these are the cash flows

(expenditure) associated with the activities related to the provision of the EDIH CASSOVIUM and the activities related to the provision of the services, where the cash flows generated by the provision of the services (revenue) must ensure that the expenditure incurred before the commencement of the provision of the services as well as the expenditure on the activities related to the provision of the EDIH CASSOVIUM are covered. At the same time, it must be ensured that the services are provided in a volume and structure that ensures the fulfilment of the KPIs.

Similarly, just as the price of the services provided by EDIH CASSOVIUM should be viewed as the value of the service provided to the customer, the revenue generated by the provision of services should be viewed as the total value of the services provided to the customer. For the sake of simplicity, the term 'revenue' is used in the text of this document. This term does not represent the amount of money paid by customers for services provided by EDIH CASSOVIUM, but represents the value of the services provided to customers, which value was used by EDIH CASSOVIUM to cover the costs associated with the provision of the service.

Table 11 - Proposed distribution of measurable indicators over time

Indicator	target value	Q1/24	Q2/24	Q3/24	Q4/24	Q1/25	Q2/25	Q3/25	Q4/25
total number of customers served	150	25	30	15	30	25	15	5	5
total number of SMEs served	130	20	27	13	25	22	13	5	5
total number of PSO served	20	5	3	2	5	3	2	0	0
number of customers in category A	40	5	9	2	13	6	3	2	0
number of customers in category B	60	17	12	4	8	9	4	2	4
number of customers in category C	10	0	2	2	2	2	2	0	0
number of customers in category D	40	3	7	7	7	8	6	1	1

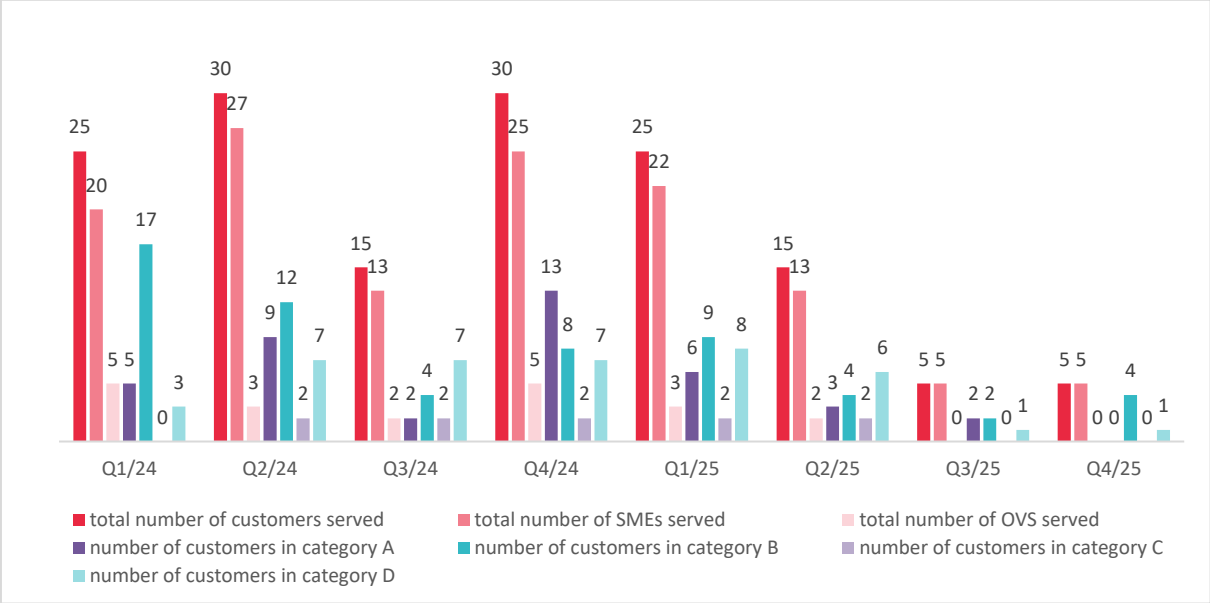


Image 7 - Proposed distribution of measurable indicators over time

The proposal for the distribution of the measurable indicators over time takes into account the need to start the provision of EDIH CASSOVIUM services as soon as possible and the need to meet the set measurable indicators. The aim is to achieve the highest possible number of customers served during 2024.

The cash flows generated by the provision of services are linked to the achievement of KPIs. Assuming 100% fulfilment of the KPI, i.e. services provided to 150 customers, the average value of services provided to each customer should be € 20 000 in order to meet the budget. The higher the number of customers (if the KPI is exceeded), the lower the average value of services provided per customer can be.

Table 12 - Projected evolution of revenue depending on the fulfilment of the measurable indicators

	target value	Q1/24	Q2/24	Q3/24	Q4/24	Q1/25	Q2/25	Q3/25	Q4/25
number of customers	150	25	30	15	30	25	15	5	5
revenue/period (€)	2 999 980	499 996	599 996	299 998	599 996	499 996	299 998	99 999	99 999
cumulative revenue (€)		499 996	1 099 992	1 399 990	1 999 986	2 499 983	2 799 981	2 899 980	2 999 980

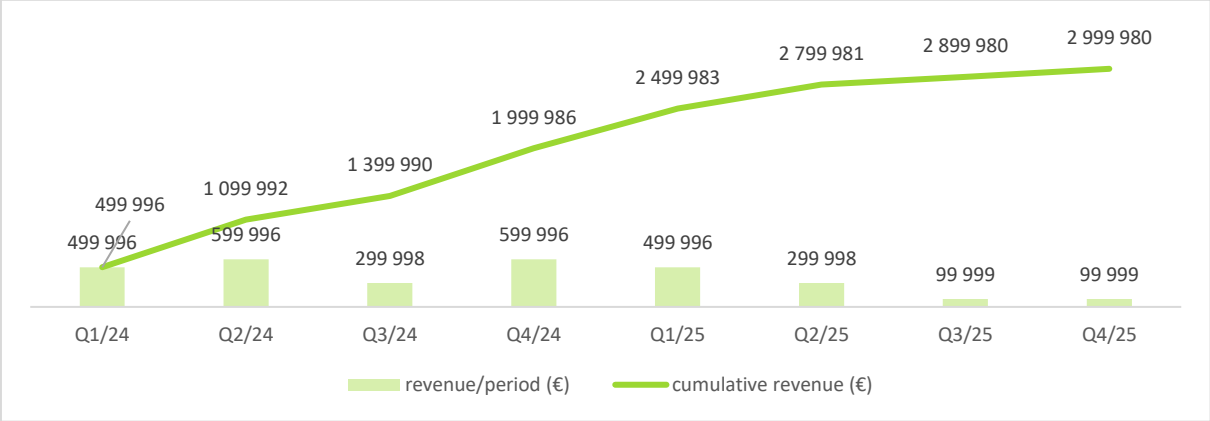


Image 8 - Projected evolution of revenue according to the fulfilment of the measurable indicators

The table and graph below show the expected and desired assumptions for the development of service revenue respectively. Actual revenue development does not necessarily follow the assumption, it is important to monitor the pace and pattern of KPI and budget development and to continuously respond to deviations between plan and reality in order to ensure that KPI and budget targets are met, respecting the staffing and technical capacity and timeframe of the project.

5.1.7 Time horizon of the activity

The time horizon of EDIH CASSOVIUM's activities is limited to 31 October 2025, until which date EDIH CASSOVIUM is entitled to provide its services, to draw on the established budget and to meet the established KPIs.

The financial strategy of EDIH CASSOVIUM must take into account the conflicting objectives of the different determinants. The common limiting factor is the time horizon of the activity, to which budget execution, KPI fulfilment and the use of staff and technical capacities need to be adapted.

The interaction of the individual determinants can be expressed as follows:

- **The EDIH CASSOVIUM budget** cannot be exceeded, with the target being that it will be fully exhausted within the timeframe set. Looking at the budget in isolation, the most efficient way of spending it is to provide the services with the highest value for money, i.e. those that contribute most to covering the other costs of the project.
  In the context of the other determinants, budget execution needs to ensure that the set KPIs are met while making efficient use of the available staff and technical capacity.
- **The KPIs** need to be met within a set timeframe. Exceeding the set KPIs is not a problem in terms of evaluating the success of EDIH CASSOVIUM's activities.

Looking at the KPIs in isolation, the most effective way of meeting them is to provide services with a relatively low cost or low demand on staff and technical capacity to ensure that the KPIs are met as quickly as possible.
In the context of the other determinants, as well as in the context of the complexity of the set KPIs, the fulfilment of the KPIs needs to ensure the set structure and numbers of services provided, while the structure and numbers of services must respect the available capacity and the efficient use of staff and technical capacities. At the same time, the services provided must ensure the required implementation of the EDIH CASSOVIUM budget.

- **Staff and technical capacities** are fixed and cannot be exceeded at any particular time. Exceeding the staff and technical capacity of a specific service, i.e. contracting more services than can be provided at the available capacity of the service, leads to the inability to provide a specific service in the required time and thus to the inability to meet the KPIs and to meet the EDIH CASSOVIUM budget. Looking at staff and technical capacity in isolation, the most efficient way to use it is to use all available capacity.
  In the context of the other determinants, the use of the available staff and technical capacity is necessary to ensure the structure and numbers of services provided in line with the established KPIs and the implementation of the EDIH CASSOVIUM budget.

5.1.8 Marketing strategy

The role of marketing strategy is to create the conditions that will contribute to the fulfillment of the mission and goals of the organization.

EDIH CASSOVIUM aims to help SMEs and the public sector improve their performance and competitiveness by improving internal processes through digital transformation and innovation.

The basic starting point in creating a marketing strategy is the identification of the marketing mix, which can be defined by the 4 P's (product - product, price - price, place - place, promotion - promotion), or 5 P's (4 P's + people - people).

In order to ensure the measurability of the above objective, it has been transformed into a set of measurable indicators (KPIs), the fulfilment of which EDIH CASSOVIUM is obliged to declare at the end of the 36-month period of its activity.

Table 13 - EDIH CASSOVIUM set of measurable indicators (KPIs)

Indicator	Definition	Target value	Responsible WP
Total number of customers served	Total number of customers/MSP/PSO who have received at least 1 service (approximately 400 services will be provided during the project)	150	WP3
Total number of SMEs served		130	WP3
Total number of public sector organisations served		20	WP3
Number of customers in category A	Total number of customers in each service category	40	WP3
Number of customers in category B		60	WP3
Number of customers in category C		10	WP3
Number of customers in category D		40	WP3
Amount of funds raised through services provided	The total amount of external funding (investor funding, grants, etc.) that customers have received as a result of the services provided (especially in category C)	€ 1 million	WP3
Bilateral EDIH corridors	Number of declared links with other EDIHs/thematic networks/other EU networks outside the region and at EU level	30 ties	WP4
Cooperation in EDIH thematic networks		6 ties	WP4
Cooperation with other pan-European networks		2 ties	WP4
Links established at regional and national level	Bilateral/Multilateral links with key players in the regional/national innovation ecosystem (including DIHs, other SK EDIHOs, public institutions, etc.)	10 ties	WP4
Percentage of customers served whose digital maturity has increased		70%	WP3
Number of start-ups/spin-offs served		15 start-ups	WP3

In addition to meeting the objectives expressed through measurable indicators, EDIH CASSOVIUM's objective is to provide services in such a scope and structure that it is able to cover the overheads that are reflected in the prices of the individual services. The price of each service in the EDIH CASSOVIUM portfolio is set to cover the direct costs of providing the service (the costs associated with the provision of the service as defined by the partner providing the service) and the overheads intended to cover the operation of EDIH CASSOVIUM.

5.1.9 Marketing mix (5P)

Product

An important step in product definition is to identify the market in which the product will be offered. Three factors are key to market definition: supply, demand and geographic definition.

The service offer is defined:

1. a portfolio of services consisting of core service groups (4 service groups) and individual services offered within each of the core groups (160 services in total):
   - Service group A - testing innovative technologies, digitisation and automation - 78 services identified in total,
   - Service group B - training and skills building - 73 services in total,
   - service group C - support for obtaining sources of funding - 3 services in total; and
   - Service group D - networking and innovation ecosystem - 6 services in total.

   The services are aimed at stimulating the widespread use of artificial intelligence, high-performance computing infrastructure, cybersecurity and the use of other digital technologies in various sectors of the economy.
2. prices, or the value of the services offered, which is indicated in the published price list, whereby the client does not pay for the service provided but the value of the service provided is reflected in the value of the funds drawn under the de minimis scheme. The value of each service offered takes into account the direct and overhead costs associated with its provision.
3. the amount of services provided, which depends on the available capacity of the individual EDIH CASSOVIUM partners, i.e. the staff, material and technical capacities of the individual partners and the EDIH CASSOVIUM budget allocated to each partner.

The demand for EDIH CASSOVIUM services depends on

1. definition of clients eligible to use EDIH CASSOVIUM services, i.e. SMEs and PSO meeting the conditions of the de minimis scheme,
2. the portfolio of services provided by EDIH CASSOVIUM, to the extent that the portfolio of services reflects the real needs of clients; and
3. the price or value of the services provided and its impact on the use of funds under the de minimis scheme of a particular client.

Geographically, the market is defined as "Eastern Slovakia" (NUTS-2: SK04) i.e. Košice Region (NUTS-3: SK042) and Presov Region (NUTS-3: SK041). This geographical definition results from the location of EDIH CASSOVIUM (the city of Košice) and its primary focus on entities operating in the geographical area. The extension of the

geographical area of operation of EDIH CASSOVIUM comes into consideration for three reasons:

- low interest in the provision of EDIH CASSOVIUM services by entities operating in the Eastern Slovakia region,
- approaching a client whose registered office is located in a region other than Eastern Slovakia or
- approached by another EDIH whose client would be potentially interested in the services provided by EDIH CASSOVIUM.

Price

EDIH CASSOVIUM services are not provided in a standard competitive environment. EDIH CASSOVIUM clients do not pay for the use of the services. The value of the services taken from EDIH CASSOVIUM is reflected in the value of the funds drawn under the de minimis scheme at half the value of the services used. In the case of EDIH CASSOVIUM services, the price of the services provided should be seen as the value of the service provided to the customer within the meaning of the State aid scheme. For the sake of simplicity, the term 'price' is used in the text of this document in connection with the expression of the value of the services provided to the customer.

EDIH CASSOVIUM is not forced to adjust the prices of its services to those of its competitors. Thus, the market does not influence the price of the services, but direct and overhead costs related to the provision of the service are the basic factor for setting the price. The price of EDIH CASSOVIUM services is not a market-based instrument.

The EDIH CASSOVIUM service prices have been notified and formally approved by the European Commission and the Ministry of Investment, Regional Development and Informatisation of the Slovak Republic (MIRRI SR). In case of a planned price change (increase or decrease) of any of the services in the EDIH CASSOVIUM portfolio, the new price proposal must be notified to the European Commission. Before the new price is applied, the price must be approved by the European Commission and MIRRI SR.

There is a need to ensure that the relationship between the cost of providing each service and the price at which the service is provided to clients is monitored on an ongoing basis. Where a disproportion between cost and price is identified, it is necessary to ensure that the price is adjusted accordingly to reflect the real costs involved. Notification and approval of the new price(s) by MIRRI SR and the EC should then be secured. Notification should be done at regular intervals (e.g. every 6 months).

Tracking the real costs of service provision is also important in terms of ensuring the

sustainability of the project in the future if funding for EDIH activities is not provided through EU drawdowns, but is dependent on the ability to provide services commercially.

Place

Location represents the way in which the product reaches the client and the availability of the product. In the case of services provided by EDIH CASSOVIUM, the location is primarily defined by the geographical area of operation, i.e. the region of eastern Slovakia. As such, the product reaches the client in the form of service provision, where the service largely represents the interaction between the client and EDIH CASSOVIUM, or the person responsible for providing the service on behalf of EDIH CASSOVIUM, in combination with

- the premises at the disposal of EDIH CASSOVIUM or the partner responsible for the provision of the service,
- the facilities (and premises) at the disposal of EDIH CASSOVIUM or the partner responsible for the provision of the service or
- client's premises.

The importance of location is high in the case of the provision of services from the group of testing of innovative technologies, digitisation and automation, where the quality of the service provided depends on the equipment used by the partner in the provision of the service.

Promotion

Promotion of EDIH CASSOVIUM products or EDIH CASSOVIUM is a tool to inform the public and potential clients about the mission, activities and services provided by EDIH CASSOVIUM. EDIH CASSOVIUM uses the following tools for its promotion:

- Web page,
- social networks (facebook, instagram, linkedIn),
- newsletter,
- Podcast,
- billboards,
- handout and
- personal contact.

The different promotion tools should be applied according to the size of the target group to be reached.

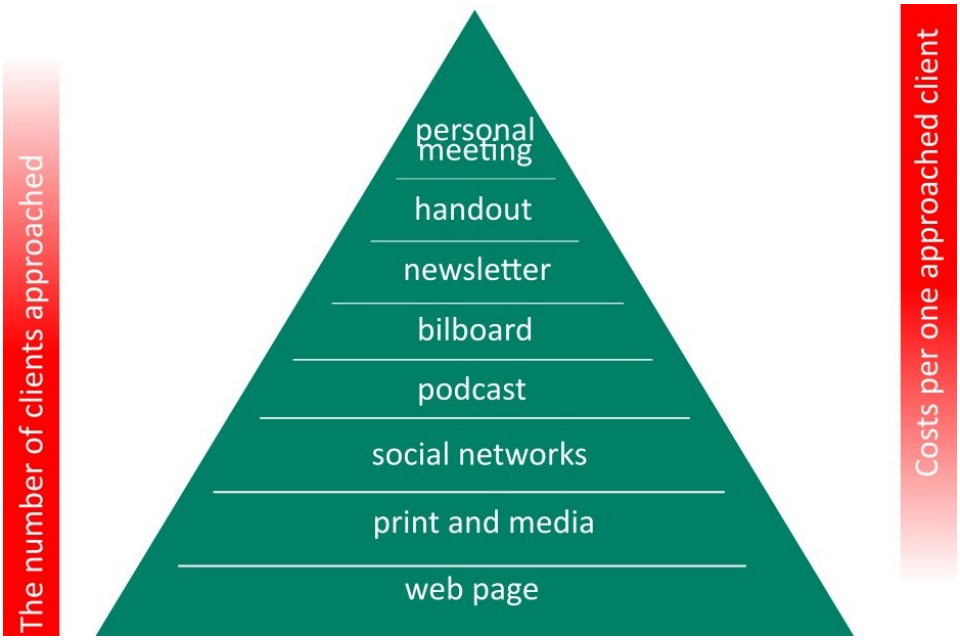


Image 9 - Promotion tools by target group size and cost

People

People are the key resource of the project, which consists of:

- employees of the partners active in the project, included in the project's organisational structure - they are responsible for project management (including budget and KPIs), for communication with partners and clients, for coordination of partners,
- employees of the partners' workplaces who are directly responsible for the implementation of the service for the client (experts for individual services) - they are responsible for the quality implementation of the service according to the client's requirements, for communication with the client (in the professional field of the provided service) during the implementation of the service and after its completion.

In terms of the services provided by EDIH CASSOVIUM, it is necessary to take into account not only the expertise of the staff responsible for the provision of specific services, but also the capacity, i.e. the ability to ensure the full provision of services in the time available.

The importance of marketing mix items in the provision of each service group is shown in the following table:

Table 14 - Importance of the different components of the marketing mix

marketing mix item	EDIH service groups			
	Group A	Group B	Group C	Group D
product	high	high	high	high
Price	Low	Low	Low	Low
Place	high	Medium	Low	Low
Promotion	high	high	high	high
People	high	high	high	high

5.1.10 Definition of a value proposition for marketing

The main and general definition of a value proposition for marketing is a promise, the added value that a provider delivers through a product or service and that makes it differentiated from competitors. It is a clear description of the unique values and benefits that the customer receives by purchasing/using the provider's product or service. The value proposition should identify why the customer should choose that particular product or service from that particular provider and how that provider differs from other providers.

EDIH's mission is to deliver on the Digital Europe agenda to stimulate the widespread use of Artificial Intelligence (AI), High Performance Computing (HPC) infrastructure, cybersecurity and the use of other digital technologies in different sectors of the economy, particularly by SMEs and SMEs in the PSO.
The goal of a value proposition is, in general, to convince the client that a given product or service offers the best value for them compared to the competition. In the case of EDIH CASSOVIUM, the objective of the value proposition is to convince the client of the importance and benefits of digitising/digital transformation of its activities, processes and products with the help of the services that EDIH CASSOVIUM can provide.

The value proposition for marketing should meet the following criteria:

1. **Values and benefits** - it is a clear definition of what values and benefits the client will get by using a particular service.
2. **Uniqueness** - identifying and highlighting the uniqueness of the service
3. **Meeting the needs of the client** - it is about creating a match between the needs and expectations of the target group of clients. The service must solve problems or provide benefits that clients consider important. At the same time, it is necessary to ensure that clients' expectations of the service are realistic.

4. **Flexibility and Adaptability** - the need and ability to respond to rapid changes in the business environment to which the service relates and the need and ability to adapt quickly to client needs and new trends
5. **Credibility** - A credible value proposition must be based on the real capabilities, knowledge and characteristics of the provider and its product or service. Failure to meet client expectations or to deliver on promises can undermine the credibility of the provider.

Table 15 - Relevance of EDIH CASSOVIUM benefits for meeting the value proposition criteria

Benefits of EDIH CASSOVIUM	criteria for the value proposition				
	values and benefits	uniqueness	meeting the client's needs	flexibility and adaptation	Credibility
Leader and main driver of digital transformation in the region	X	X	X	X	X
high level of expertise in the issues covered by the service portfolio	X	X	X	X	X
contacts built through the EDIH infrastructure and through the consortium's experts		X	X	X	X
local knowledge	X	X	X	X	X
regional presence in eastern Slovakia		X		X	
free provision of services	X	X	X		

The starting point for setting up a suitable value proposition for marketing is a correct and comprehensive definition of the VPC - Value proposition canvas. The Value Proposition Canvas is a tool within the Business Model Canvas methodology that helps businesses better understand and visualize the value proposition of their products or services to the customer.

5.1.11 Risk management

Effective risk management in an organisation requires adherence to the following principles:

- Integration - risk management is part of all activities carried out within the organisation;
- Structured and comprehensive - a structured and comprehensive approach to risk management contributes to consistent and comparable results;
- Adaptation - the risk management framework and process is tailored and appropriate to the external and internal context of the organisation as it relates

to its objectives;

- Inclusion - appropriate and early stakeholder engagement will ensure that their knowledge, perspectives and perceptions are taken into account. This leads to improved awareness and informed risk management.
- Dynamic - risks can emerge, change or disappear depending on changes in the internal and external context of the organisation. Risk management anticipates, identifies, recognises and responds to these changes and events in an appropriate and timely manner.
- best available information - inputs needed for risk management are based on historical and current information and on future expectations. Risk management explicitly takes into account any limitations and uncertainties associated with information and expectations. Information shall be timely, clear and made available to relevant stakeholders.
- Human and cultural factors - human behaviour and culture significantly influences all aspects of risk management at all levels and at every stage;
- Continuous improvement - risk management is continuously improved through learning and experience.

Risk management process in the organisation

The risk management process involves the systematic application of policies, procedures and practices to activities related to communicating and consulting, contextualising, and assessing, treating, monitoring, verifying, recording and reporting risks. This process consists of the following activities:

- **Communication and consultation** - the purpose is to help relevant stakeholders understand the risks, the basis on which decisions are based and the reasons why specific actions are required. Communication aims to improve awareness and understanding of risks. Consultation involves obtaining feedback and information to support decision making. The coordination of these two activities aims to facilitate factual, timely, relevant, accurate and comprehensible information exchange, taking into account confidentiality and integrity of information and the right to privacy. Communication and consultation with appropriate internal and external stakeholders should take place within and throughout all steps of the risk management process.
  The aim of communication and consultation is
  - bring together different areas of expertise at each step of the risk management process;
  - ensure that different perspectives are taken into account in defining criteria and in assessing risk;
  - provide sufficient information to facilitate risk oversight and decision-making;

- Create a sense of inclusion among team members who are affected by the risk.

- **setting the scope, context and criteria** - the purpose is to tailor the risk management process, to enable effective risk assessment and appropriate risk treatment.
  - scoping - the organisation defines the scope of risk management activities. The risk management process can be applied at different levels (strategic, operational, programme, project). It is important to clearly define the scope to be assessed, the relevant objectives to be assessed and their alignment with the organisation's objectives.

  When planning access, the following should be taken into account:
  - goals and decisions to be taken;
  - expected outputs of each step in the process;
  - time, place, specific inclusions and exclusions;
  - appropriate risk assessment tools and techniques;
  - resources needed, responsibilities and records to be kept;
  - relationships with other projects, processes and activities.

  External and internal context - represents the environment in which the organisation seeks to define and achieve its objectives. The context of the risk ranking process should be based on the perception of the external and internal environment in which the organisation operates and should take into account the specific environment of the activity to which the risk management process relates. Understanding the internal and external context is important for the following reasons:
  - risk management takes place in the context of the organisation's objectives and activities;
  - organisational factors can be a source of risk;
  - the purpose and scope of the risk management process can be related to the objectives of the organisation as a whole within the organisation.

  Defining risk criteria - the organisation needs to specify the extent and type of risk that it is or is not able to accept in relation to the objectives. It should define criteria for assessing the severity of risk for decision support purposes. The risk criteria should be consistent with the risk management framework and set to reflect the specific purpose and scope of the activities under consideration. Risk criteria should reflect the organisation's values, objectives, resources and be consistent with policies and statements that relate to risk management. Criteria should be defined taking into account the responsibilities of the organisation and the attitudes of stakeholders. Risk criteria should be

established at the beginning of the risk management process, but they are dynamic and need to be reviewed and refined on an ongoing basis. When establishing risk criteria, the following should be taken into account:

- the nature and type of uncertainty that can affect the outcome and objectives;
- a way of defining and measuring consequences and probabilities;
- factors related to time;
- consistency in the application of measures;
- method of determining the level of risk;
- a way of taking account of combinations and sequences of multiple risks;
- capacities of the organization.

- **Risk assessment** - a process of risk identification, risk analysis and risk assessment; it needs to be carried out in a systematic, interlinked and collaborative way, drawing on the knowledge and views of stakeholders. It should be based on the best available information.

Risk identification - the aim is to find, identify and describe the risks that may cause the organisation to fail to meet its objectives. Relevant, appropriate and up-to-date information is critical to identifying risks. An organisation may use a variety of techniques for the purpose of risk identification. The organisation should consider the following factors and the relationships between them:

- tangible and intangible sources of risk;
- causes and events;
- threats and opportunities;
- vulnerabilities and capabilities;
- changes in the external and internal context;
- signs of emerging risks;
- the nature and value of assets and resources;
- consequences and their impact on objectives;
- limitations of knowledge and reliability of information;
- factors related to time;
- prejudices, assumptions and beliefs of the participants.

The organisation must identify risks regardless of whether the sources of those risks are within its control. Consideration should be given to the fact that there is more than one outcome that may cause different tangible or intangible consequences.

Risk analysis - the aim is to understand the nature of the risk and its characteristics, including the level of risk. Risk analysis includes a detailed assessment of uncertainties, sources of risk, consequences, probabilities,

events, scenarios, measures and their effectiveness. An event may have multiple causes and consequences and may affect multiple objectives. Risk analysis can be carried out with varying degrees of detail and complexity, depending on the purpose of the analysis, the availability and reliability of information and the resources available. Analysis techniques may be qualitative, quantitative or a combination of both, depending on the circumstances and the intended purpose. Risk analysis should take into account:

- probability and consequences of events;
- the nature and severity of the consequences;
- complexity and interconnectedness;
- time-dependent factors and variability;
- the usefulness of existing measures;
- sensitivity and reliability level.

Risk analysis can be influenced by differences of opinion, prejudices, risk perceptions and judgements. Additional influences are the quality of the information used, assumptions and exclusions, limitations of the technique used and the way it is applied. These influences need to be considered, documented and communicated to decision makers.

Events with a high level of uncertainty are difficult to quantify; this can pose a problem when analysing events with severe consequences. In such cases, a combination of techniques can also be used to gain better insight.

Risk analysis provides input for assessing risk, for deciding whether and how to treat risk and for deciding on the most appropriate strategy and method for dealing with risk. The results provide insight for selection decisions when options include different types and levels of risk.

Risk assessment - serves as decision support and involves comparing the results of the risk analysis with established risk criteria. This can lead to a decision:

- to take no further action;
- assess risk treatment options;
- to proceed to further analysis to better understand the risk;
- maintain existing measures;
- reassess the objectives.

Decision-making needs to take into account the broader context and the actual as well as perceived consequences for external and internal stakeholders. The results of the risk assessment need to be recorded, communicated and

subsequently verified at the appropriate levels of the organisation

- **risk handling –** the aim is to select and implement options to address the risk; involves an iterative process
  - formulating and selecting options for dealing with risk;
  - planning and implementation of risk management;
  - assessing the effectiveness of the chosen risk treatment;
  - deciding on the acceptability of the remaining risk;
  - if the chosen risk treatment is not sufficient, a decision on another risk treatment.

Choice of risk treatment options - the choice of the most appropriate risk treatment option involves a balance between the potential benefits of achieving the stated objectives and the costs, effort or disadvantages of implementation. Risk treatment options are not necessarily mutually exclusive or appropriate in all circumstances. Risk treatment options may include one or more of the following:

- avoiding risk by deciding not to start or continue an activity that increases risk;
- taking or increasing risk in order to realize an opportunity;
- removing the source of risk;
- change in probability;
- change of consequences;
- sharing the risk (by contract or insurance);
- preserving risk through informed decision.

The rationale for treating risk is broader than a purely economic assessment and should take into account all the responsibilities and voluntary commitments of the organisation and the perspectives of stakeholders. The treatment option should be chosen in accordance with the organization's objectives, risk criteria, and available resources. In selecting a risk treatment option, the organization should consider the values, perceptions and potential considerations of stakeholders and the most appropriate means of communicating and consulting with them. Despite equal effectiveness, some risk treatment options may be more acceptable to some stakeholders. Despite a carefully designed and implemented risk management approach, it may not deliver the expected benefits and may have unintended consequences. Monitoring and review must be an integral part of the implementation of risk management to ensure that the various forms of treatment become and remain effective. Risk treatment may lead to new risks that need to be managed.

If there are no options for dealing with the risk, or if the options for dealing with the risk do not result in sufficient risk reduction, the risk shall be recorded and reviewed on an ongoing basis. Decision-makers and stakeholders should be made aware of the nature and extent of the risk remaining after risk treatment has been implemented. The remaining risk should be documented, monitored, reviewed and, if necessary, subjected to further treatment.

Design and implementation of risk management plans - the aim of risk management plans is to specify how selected risk management approaches will be implemented so that stakeholders can understand the actions taken and so that progress against the plan can be monitored. The plan should clearly identify the order in which the plan should be implemented. Plans should be integrated into management plans and processes within the organisation in consultation with appropriate stakeholders. The information contained in the plans should include

- justification for the choice of treatment, including the expected benefits;
- list of persons responsible and charged with the approval and implementation of the plan;
- proposed measures;
- required resources, including contingencies;
- implemented measures;
- limitations ;
- required monitoring and reporting;
- information on when the expected actions are to be implemented and completed.

- **Monitoring and review** - the aim is to ensure and improve the quality and effectiveness of the design, implementation, and outcomes of the process. Ongoing monitoring and periodic review of the risk management process and its outcomes is a planned part of the risk management process with clearly defined responsibilities. Monitoring and review should take place at all stages of the process and includes planning, collecting and analysing information, recording results and providing feedback. The results of monitoring and review should be embedded in the organisation's performance management and performance measurement and reporting activities

- **recording and reporting** - the risk management process and its outputs need to be documented and reported using appropriate tools. The objective of recording and reporting is to
  - Communicate risk management activities and outcomes;

- provide information for decision-making purposes;
- improve risk management activities;
- provide support in interacting with stakeholders, including those responsible for risk management activities.

Decisions on the creation, storage and handling of documented information shall take into account, in particular, its use, sensitivity and internal and external context.

Reporting is an integral part of corporate governance and should improve the quality of dialogue with stakeholders and ensure that senior management and supervisors are supported in their responsibilities. In particular, reporting should take into account the following factors:

- the different stakeholders and their specific needs and information requirements;
- cost, frequency and timeliness of reporting;
- reporting methods;
- the relevance of the information to the organisation's objectives and decision-making.

Image 10 - Diagram of the risk management process

Risk identification EDIH CASSOVIUM

The main risks associated with EDIH CASSOVIUM's activities, their potential impact on the project and measures to eliminate or reduce the negative impact of the risks are presented in the Table 16:

Table 16 - Identified risks, their impact and relevant actions

risk	impact on the project	draft measure
failure to meet KPIs	• questioning the purpose and sustainability of EDIH CASSOVIUM • inability to cover other project costs	• launching service provision as soon as possible by proactively reaching out to identified potential customers • regular evaluation of KPI performance • measures to increase the "sales" of services - marketing, including direct approaches to potential customers
budget underspending	• questioning the purpose and sustainability of EDIH CASSOVIUM • inability to cover other project costs	• launching service provision as soon as possible by proactively reaching out to identified potential customers • measures to increase the "sales" of services - marketing, including direct approaches to potential customers • products comprising a group of several services provided to a single customer • emphasis on identifying customer needs through DMA
budget overruns	• the inability to cover the direct costs of the services	• regular monitoring of compliance with the KPI plan and budget and updating the plan based on the results achieved
exceeding staff and technical capacities	• failure to provide services within the declared scope, quality and time • inability to cover other project costs	• monitoring the available capacity of individual workplaces • updating the available capacities on the basis of the actual staffing and technical requirements for the provision of a specific service
the price of the service not covering the direct costs of the service	• the inability to cover the actual direct costs of the services to the workplaces	• adjusting the prices of services on the basis of the actual staffing and technical complexity of providing a particular service

5.1.12 Green Strategy - Proposals for a green operation of EDCASS

The grant agreement with the European Commission sets out the strategic framework for the project in the field of environmental sustainability, which is hierarchically based on the following strategic documents:

- The European Green Deal,
- National strategy for sustainable development and
- Adaptation strategy for the consequences of climate change in the Košice Region.

Individual project partners have their own initiatives in the following areas:

- Green University Strategy (TUKE and UPJS),
- "Race to zero" campaign (UPJS),
- Cluster Management Excellence Label Gold (KEITVA).

The grant agreement encourages EDIH CASSOVIUM to set its policy on sustainability. This policy has 2 main areas:

- product and client measures; and
- measures in the area of own operations.

Product and client measures

In addition to supporting the digital transformation of SMEs and public institutions, EDIH CASSOVIUM's role is to emphasise and support green digital transformation, especially in sectors such as energy, transport and construction.

EDIH CASSOVIUM has declared in a pilot operation that it will:

- Provide environmental education and demonstrate best practice in this area (e.g. planning, construction, operation and power supply of green buildings, green transport);
- identify and support circular economy initiatives;
- Stimulate the digitalisation of the economy instead of traditional approaches that are very damaging to the environment.

Education and training activities in the area of open data will also be an important part of the services provided to EDIH CASSOVIUM customers and partners. EDIH CASSOVIUM will actively monitor and identify trends and requirements in the field of environmental protection, which it will then integrate into the respective services and digital maturity assessment models of its clients.

In the area of products and clients, we recommend the following measures:

- **Assessment of the contribution of the service provided to the sustainability of the client's ecosystem**
  In the Customer Journey process, we propose to add a step between defining the service and signing the contract. This step would include an assessment and evaluation of the contribution of the service to sustainability for the client. In parallel with step "DMA 1" we propose to carry out a reassessment of sustainability. We propose the assessment only as a simple verbal evaluation prepared by the responsible EDIH CASSOVIUM staff member.
- **ESG self-assessment**
  We suggest that EDIH CASSOVIUM, as part of spreading awareness on the topic of sustainability, should offer the possibility to fill in a self-assessment questionnaire for the ESG area. There are ready-made solutions, e.g. CRIF - Synergy. The filling in of such a questionnaire would be purely voluntary, with

no impact on the service provision or the need to interact with EDIH CASSOVIUM staff.

- **Sustainability training**
  In order to evaluate the contribution of the services provided to sustainability, as well as to provide services with sustainability in mind, it is essential that EDIH CASSOVIUM staff who will be in contact with clients receive professional training on sustainability, its content, legislative framework and potential impacts on clients' businesses.

Measures in the area of own operations

The European Commission recommends in the grant agreement to implement:

- the procurement process and supply chain monitoring,
- policy on business travel with a view to replacing it with an online event,
- processes for measuring carbon emissions,
- Prioritising public and modern environmentally oriented modes of transport over other forms,
- Comprehensive equipment reuse solutions,
- Eliminate single-use plastics wherever possible and practical (education, counselling/training activities).

These recommendations should be considered and taken into account when declaring relevant sustainability themes and targets.

5.1.13 Topics relevant to sustainability

Relevant topics need to be identified from two perspectives:

- in terms of the importance of the impact on EDIH CASSOVIUM and
- in terms of relevance to the identified stakeholders.

Environmental sustainability should focus on the following areas:

- Climate change and biodiversity - how EDIH can support companies to implement digital solutions to adapt to climate change and minimise negative impacts on the environment,
- Pollution - a theme focusing on digital innovations to reduce air, water and soil pollution. EDIH can support projects and solutions that use digital technologies to monitor and minimise pollution.
- Circular economy - the theme includes digital solutions for resource efficiency, waste minimisation and the promotion of a circular economy.

The **climate change and biodiversity** area covers the study and implementation of measures for adaptation and mitigation of climate change impacts, while promoting biodiversity and ecosystem sustainability in the Eastern Slovakia region. This theme focuses on the development of digital tools and innovations to help manage, monitor and improve environmental performance and biodiversity conservation.

EDIH CASSOVIUM should strive for the following:

- Identifying and implementing digital solutions that help organisations and citizens adapt to the impacts of a changing climate;
- Implementing digital technologies to reduce emissions and improve energy efficiency in various sectors, including industry, transport and energy.

The **pollution** area focuses on the development and implementation of digital solutions that identify, monitor and reduce various forms of air, water and soil pollution in the Eastern Slovakia region. The aim is to provide sustainable and innovative approaches to reducing the negative environmental impacts of industrial, transport and other human activities.

EDIH CASSOVIUM will strive for the following:

- Development and/or implementation of technologies for monitoring and detection of air, water and soil pollution, with emphasis on pesticides, heavy metals and other contaminants;
- Implementation of digital tools to monitor food safety and identify contamination incidents in the food chain;
- development and implementation of systems to regulate and control the use of potentially hazardous substances and to implement safer alternatives;
- environmentally friendly forms of transport will be preferred in the provision of EDIH CASSOVIUM services.

The **Circular Economy** strand is a set of digital initiatives and innovative approaches that aim to promote the sustainable use of resources. It focuses on waste minimisation, efficient use of raw materials and the promotion of renewable economic models in the Eastern Slovakia region.

EDIH CASSOVIUM will strive for the following:

- promoting systems that enable efficient sharing and exchange of materials between industries and businesses;
- developing intelligent systems to track and manage waste to minimise its environmental impact;
- Implementation of digital technologies for recycling and reusing materials, including tracking the recyclability of products;

- in the provision of EDIH CASSOVIUM services, digital forms of output as well as internal records will be preferred.

Social responsibility covers the following topics:

- Workers and co-workers - the topic is aimed at avoiding discrimination in working conditions and pay; and
- Customers - the topic is focused on ensuring the security of client data in accordance with cybersecurity and GDPR standards.

Workers and co-workers is a topic where EDIH CASSOVIUM should place a strong emphasis on the values associated with the work environment and interpersonal relationships in the workplace and profess a belief in fairness and equal opportunities for all team members. We strive to create an environment in which fair compensation and recognition is rooted in the values of transparency and acknowledgement of each individual's contribution. The latest health and safety standards must be followed in order to create safe working conditions.

EDIH CASSOVIUM should strive for the following:

- Fair pay - emphasis on ensuring fair rewards and recognition for staff and colleagues, establishing transparent appraisal and reward mechanisms that reflect the contribution and commitment of individuals;
- Equal treatment and opportunity - the organisation is committed to the principle of equal treatment and opportunity for all. Any forms of discrimination are actively eliminated and it is ensured that every team member has equal opportunities for personal and professional growth.
- working conditions - EDIH CASSOVIUM is committed to providing safe and healthy working conditions. Implementing the latest safety and hygiene standards to ensure the well-being and safety of workers.
- personal and professional development - supporting the personal and professional development of staff is key. Opportunities for education, training and competence development will ensure that each individual can reach their full potential in the work environment.

Customers represent organisations and entities that use EDIH CASSOVIUM services and are involved in digitisation, data analytics and innovation processes. Customers are looking for advanced solutions in the field of digital transformation.

Customers are considered key partners and their satisfaction is in the interest of EDIH CASSOVIUM. It is necessary to approach them individually, identifying their specific needs and requirements. The personalised solutions provided should be aimed at supporting digital transformation and innovation processes. At the same time,

emphasis should be placed on security, with particular attention to cybersecurity and data protection. Collaboration with customers should be seen not just as a business relationship, but as a long-term partnership, where customer needs are pursued, challenges are met and a commitment to deliver value through digital and innovative services is demonstrated.

Governance and corporate governance covers the following topics:

- Business conduct - the theme focuses on the ethical conduct of employees towards clients and colleagues, as well as educating and promoting digital solutions to manage company culture (e.g. whistleblower protection),
- Sustainability of operations - the topic relates to securing the future operation of EDIH CASSOVIUM beyond the pilot phase.

Business conduct primarily means that EDIH CASSOVIUM employees subscribe to the codes of ethics of the respective partners (TUKE and UPJS) and undertake to provide services in accordance with these codes of ethics. It is necessary for EDIH CASSOVIUM to declare adherence to ethical standards and values in the work environment and in relations with stakeholders.

Sustainability of operations is an area where EDIH CASSOVIUM staff will take all necessary steps to ensure that EDIH CASSOVIUM's activities are sustainable after the end of the grant funding from the EC and MIRRI SR. In particular, this involves collecting data on the possibility and ability of clients to use EDIH CASSOVIUM services on a commercial basis as well as on the ability of EDIH CASSOVIUM to ensure the provision of these services, in order to establish the basis and preconditions for the continuation of EDIH CASSOVIUM activities.

5.1.14 Quality and evaluation strategy

The quality strategy must be based on the fundamental objective of EDIH CASSOVIUM, which is to help SMEs as well as the public sector to improve their performance and competitiveness by improving internal processes through digital transformation and innovation.

EDIH CASSOVIUM's mission is not to provide services as such, but to help clients improve their performance through the services provided by EDIH CASSOVIUM.

The services in the EDIH CASSOVIUM portfolio have the potential to increase the digital maturity of customers.

The process of providing EDIH CASSOVIUM services can be divided into three basic phases:

1. client identification and selection,
2. the provision of the service and
3. assessing the impact of the service on the client's performance.

Quality management

Quality management can generally be defined as a set of activities designed to ensure the quality of products or services that will meet customer expectations.
Quality management from the EDIH CASSOVIUM perspective needs to be applied in all three phases of the service delivery process.

In the client identification and selection phase, it is necessary to identify the client who:

1. meets the basic conditions for the provision of the service in terms of eligibility
   a) MSP or PSO and
   b) compliance with de minimis conditions,
2. has the prerequisites for the use of services from the EDIH CASSOVIUM portfolio - the portfolio of services provided by EDIH CASSOVIUM includes services that can be used in the sector in which the client operates,
3. has the potential to benefit from EDIH CASSOVIUM services - the client can reasonably be expected to actively cooperate in the service delivery phase,
4. has the prerequisites for the use of the service - the client (in cooperation with EDIH CASSOVIUM) has identified its "tasks" and "pains", the solution of which has the potential to contribute to improving its performance and competitiveness,
5. has the perspective to resolve their challenges and pain by using the services provided by EDIH CASSOVIUM, which provide the expected "pain relievers" (pain relievers) and "gain creators" (gain creators).

While points 1 and 2 can be verified relatively easily using the tools available at2 , points 3 to 5 require personal contact with the client, whereby the contact person on the EDIH CASSOVIUM side must have the necessary knowledge and skills to identify the client's potential, prerequisites and prospects for using one of EDIH CASSOVIUM's services.

An essential tool to be used in the client identification and selection phase is the Digital Maturity Assessment (DMA) questionnaire.

The DMA enables the measurement and analysis of the increase in digital maturity of a

[2] Portal Finstat.sk to verify the size of the client and the sector in which the client operates, or the "Portal for recording and monitoring aid" to verify compliance with the condition for de minimis aid

client who has used EDIH services as a result of using EDIH services. The increase in digital maturity of a client is one of the standard KPIs for assessing the performance and success of individual EDIHs. In the case of EDIH CASSOVIUM, the value of the KPI "Percentage of clients served whose digital maturity has increased" is set at 70%.

The DMA was developed at EU level as a single tool to assess the success of EDIH. The DMA is a mandatory tool to monitor the increase in digital maturity, to be used prior to any significant EDIH3 intervention towards a customer. Assistance from EDIH is required when the customer completes the DMA. A different type of DMA is used to assess the digital maturity of SMPs than is used to assess the digital maturity of PSO. The DMA aims to monitor the digital transformation of entities that have used the EDIH service/support.

The DMA value of each client is measured at three time points:

1. T0 – measuring the baseline level of digital maturity prior to using the EDIH service/support,
2. T1 – measuring the change in digital maturity level 1 year after the end of service/support by EDIH; and
3. T2 – measuring the change in digital maturity level 2 years after the measurement of digital maturity level T1.

The DMA for SMEs consists of the following modules:

Module 1 - customer data

- General customer data - this is basic customer identification and contact data, data on the size of the business and the date of its establishment,
- specification of the sector in which the customer operates (primary and secondary sector).

Module 2 - Digital Maturity. This module is divided into 6 areas.

- Digital business strategy - the questions aim to capture the overall state of a company's digital strategy from a business perspective. The questions relate to the company's investment in digitalisation in each business area (either implemented or planned), as well as the company's readiness to embark on a digitalisation journey that may require previously unforeseen organisational and economic efforts.
- Digital readiness - used to assess the current use of digital technologies (both mainstream and more advanced technologies), covering both manufacturing and service companies,
- People-centred digitalisation - used to assess how employees are skilled,

[3] The use of a DMA is not required, e.g. in the case of the provision of a one-day training service. The decision to use a DMA for particular types of services or for particular services is at the discretion of EDIH.

engaged, empowered by and through digital technologies and how their working conditions have been improved to increase their productivity and ensure good working conditions,

- Data management and connectivity - refers to how data is digitally stored, organised within the business, accessed on connected devices (computers, etc.) and used for business purposes, while ensuring sufficient data protection through cyber security systems,
- Automation and Artificial Intelligence - the level of automation and artificial intelligence provided by digital means that is embedded in business processes is examined,
- Green digitalisation - refers to a company's ability to implement digitalisation with a long-term approach that is responsible and cares about the protection and sustainability of natural resources and the environment (and ultimately builds competitive advantage on this basis).

The DMA for PSO consists of the following modules:

Module 1 - customer data

- General customer data - this is basic customer identification and contact data, data on the number of employees and the type of organisation,
- specification of the sector (management area) in which the customer operates (primary and secondary sector).

Module 2 - Digital Maturity. This module is divided into 6 areas.

- Digital strategy and investment - the questions aim to capture the overall state of the organisation's digital strategy. The questions relate to the readiness of the organisation to embark on a digitalisation journey, which may require previously unforeseen organisational and economic efforts, as well as related digitalisation investments in specific areas (either made or planned).
- Digital readiness - used to assess the current use of digital technologies (both mainstream and more advanced technologies),
- People-centred digitalisation - used to assess how employees are skilled, engaged, empowered by and through digital technologies and how their working conditions have been improved to increase their productivity and ensure good working conditions,
- Data management and security - refers to how data is digitally stored, organised within the organisation, accessed on connected devices (computers, etc.) and used for specified purposes, while ensuring that data is adequately protected through cyber security systems. The questions relate to data stored in all possible forms, including documents.
- Interoperability - examines the level of interoperability achieved by the organisation, measured against the level of planning/implementation of one of the 12 interoperability principles of the new European Interoperability

Framework (EIF),

- Green digitalisation - refers to an organisation's ability to implement digitalisation with a long-term approach that is responsible and cares about the protection and sustainability of natural resources and the environment.

Given that the DMA is a tool for monitoring the digital transformation of entities that have used the EDIH service/support, it is important that only those entities (clients) for which there is a reasonable expectation that the use of the EDIH CASSOVIUM service will result in an increase in digital maturity complete the DMA. When deciding which clients or services will be covered by the DMA, expert judgement is required to determine whether the provision of a particular service can be expected to produce better DMA results at T1 or T2 than the DMA results at T0.

The expert assessment should be carried out before the client is asked to complete the DMA or before the actual conclusion of the contract for the provision of EDIH CASSOVIUM services to a particular client. Given that the DMA is binding for EDIH clients who have received significant support, these clients have an obligation to provide data or a completed DMA at T1 and T2 respectively, and the fulfilment of this obligation should be ensured by the provisions of the service contract and taken into account in the interaction with the client prior to the conclusion of the contract.

Completion of the DMA by the client requires active assistance from EDIH CASSOVIUM to ensure that the client understands the questions correctly while providing answers that reflect the real situation. It is therefore necessary that the EDIH CASSOVIUM staff who will accompany the client in completing the DMA questionnaire understand the individual questions and also have sufficient knowledge of the environment and circumstances in which the particular client finds himself/herself. The role of the staff who will assist the client in completing the DMA is, in addition to completing the data for the purposes of the DMA, to identify the challenges faced by the client and to identify the services from EDIH CASSOVIUM's portfolio that have the potential to address these challenges.

Before actually completing the DMA, the designated staff member (the staff who will assist the customer in completing the DMA) should study (from available public sources) information about the customer as well as the environment in which the customer operates. Well in advance of the actual meeting, the designated staff member must inform the customer of

- topics contained in the DMA,
- the estimated time required to complete the DMA and
- a list of people on the customer side (in terms of job description) whose participation in the questionnaire could have a positive benefit.

Based on this information, it is possible to ensure that the customer prepares for the questionnaire, allocates the necessary time and is able to provide all relevant information. This will ensure efficiency in completing the DMA in terms of time use and quality assurance of the output.

In the service delivery phase, it is necessary to ensure:

1. that the persons (experts) whose participation has been declared to the client at the client identification stage participate in the service provision,
2. that the experts devote as much time to the client as is necessary to provide the service at the declared quality, not as much time as was anticipated at the time the service was priced,
3. that the service is provided to the declared quality in the shortest possible time, so that the costs incurred by the customer in connection with the provision of the service (e.g. as a result of the customer assisting in the provision of the service) are as low as possible,
4. regular communication with the customer about the status of the service and any problems that occur in the course of providing the service,
5. regular internal communication (within EDIH CASSOVIUM) about the status of the service and any problems that arise in the course of the service,
6. where appropriate and possible, active participation and cooperation of the customer in the provision of the service,
7. Ongoing analysis of whether the service has the potential to address the 'challenges' and 'pains' identified in the customer identification and selection phase,
8. that all costs associated with the provision of the service on the part of EDIH CASSOVIUM are recorded internally (time spent by all experts on the provision of the service, costs of materials, energy, use of facilities and premises, travel, etc.). This information will be used to evaluate the reasonableness of the price of the service in relation to the costs actually incurred and will serve as a basis for future price adjustments.

At the stage of assessing the impact of the service on customer performance, it is necessary to ensure:

1. customer feedback on the course and result of the service provided in terms of the quality of the experts who participated in the provision of the service, the quality of the service as such, the level of communication between the client and EDIH CASSOVIUM,
2. customer feedback for the purposes of assessing the actual benefit of the service in relation to the identified 'pains', assessing the cost of providing the service, whereby the cost of the service must include, in addition to the price

or value of the service as per the EDIH price list, costs on the customer's side that were related to the provision of the service (e.g. customer's staff time),

3. regular or ad hoc contact with the customer aimed at
   a) to find out what real benefits the service provided by EDIH CASSOVIUM has had and
   b) Identify other needs of the client, whether in relation to EDIH CASSOVIUM services or other services provided by partners,
4. completion of the DMA by the client at time T1 and T2 - for this purpose it is necessary to record, within the customer records, the specific dates of service provision and in relation to these dates to ensure that the customer is approached with a request to complete the DMA at time T1 and T2. In order to successfully complete the DMA at T1 and T2, the customer should be informed well in advance of the meeting of
   a) topics contained in the DMA,
   b) the estimated time required to complete the DMA and
   c) a list of people on the customer side (in terms of job description) whose participation in the questionnaire could have a positive benefit.

5.1.15 Control and monitoring mechanisms

Design of a system for collecting feedback from clients

The system for collecting feedback from EDIH CASSOVIUM clients must be based on the goals that EDIH CASSOVIUM wants to achieve based on the feedback. The objectives of collecting feedback from EDIH CASSOVIUM clients can be summarised as follows:

- Improving the quality of service provision (identifying bottlenecks),
- improving communication,
- improving promotion,
- identification of key existing services,
- identification of new services,
- assessment of the price/benefit ratio of the service for the client,
- Identification of the need for additional resources (personnel, material),
- assessing the contribution of the service provided to increasing the digital maturity of the customer,
- assessing the actual benefit of the service to the customer in relation to the identified 'pains'.

The choice of the form of feedback collection largely depends on the objective pursued by the feedback collection, with telephone survey, electronic questionnaire, face-to-

face meeting, or a combination of several forms as the basic forms that can be used.

When formulating questions for the purpose of collecting feedback, the form used should be taken into account. The more impersonal the form used, the clearer and more comprehensible the questions should be.

The more complex the feedback collection objectives, the more appropriate the form of feedback collection is personal contact with the customer.

When collecting feedback, it is important to take into account the need to ensure the anonymity of the respondent, or to ensure the impartiality of the entity collecting the feedback if the collection is carried out in the form of a face-to-face meeting. It is therefore appropriate that the collection of feedback should be carried out by persons other than those who provided the service being evaluated.

Important aspects of the feedback collection are

- Periodicity, i.e. whether the collection is carried out on a regular basis or on a one-off basis – for some feedback collection objectives it is sufficient to reach customers on a one-off basis, for others it is necessary to reach customers on a regular basis,
- the time gap between service delivery and feedback collection – while for some purposes it is appropriate to ensure that the gap between service delivery and feedback collection is as short as possible (for example, assessing the quality of staff delivering the service), for the purposes of assessing the real contribution of the service to the removal of identified 'pain' it is more appropriate to choose a longer time gap between service delivery and feedback collection.
- A key step in the feedback collection system is the processing and analysis of the collected data and its use to achieve the objectives of the feedback collection.

Design performance metrics (key performance indicators) to monitor the success of services

Monitoring and measuring the success of services provided by EDIH CASSOVIUM is relevant for the categorisation of services, particularly in terms of

- attractiveness for customers,
- ability to contribute to KPIs,
- the ability to contribute to the implementation of the budget,
- sustainability of service provision (personnel, energy, technological intensity of the service),

- the relationship between the price and the cost of the service,
- the sustainability of EDIH CASSOVIUM's activities in the future and
- updating the portfolio of services provided.

For the purpose of assessing the success of services, the following indicators should be monitored for each service:

- **the number of potential clients** - the number of clients who can use the service (expressed, for example, in terms of the number of sectors where the service can be applied),
- **number of clients approached** - how many clients showed "spontaneous" interest in the service, how many clients were actively approached with the offer of the service and how many clients showed real interest in the service, or how many clients were actually provided with the service,
- **the ability of the service to increase the digital maturity of the client** - does the service have the potential to increase the digital maturity of the client,
- **the ability of the service to contribute to the achievement of the KPI** - the achievement of which KPI can be ensured by the provision of the service,
- **the ability of the service to meet the budget (cover overheads)** - the extent to which the service contributes to meeting the budget or to covering EDIH CASSOVIUM's overheads,
- **number of services provided** - how many clients actually used the service (or groups of services)
- **service success rate**
  - number of satisfied clients based on a satisfaction survey,
  - the contribution of the service to increasing the digital maturity of the client (DMA assessment),
  - the client's perception of the price/benefit ratio of the service,
- **does the price of the service reflect its real cost** - what is the ratio of the actual costs incurred to the declared price of the service.

Design of a system for collecting feedback from employees and a system for employee development

The system for collecting feedback from EDIH CASSOVIUM employees or employees of individual partners must be based on the goals that EDIH CASSOVIUM wants to achieve based on the feedback. The objectives of collecting feedback from employees can be identified as follows:

- Improving the quality of service provision (identifying bottlenecks),
- improving communication,
- improving promotion,
- identification of key existing services,

- identification of new services,
- identification of new clients,
- Identification of the need for additional resources (personnel, material),
- Determining the real costs and capacities for service delivery.

When choosing the form of feedback collection, there are two basic forms to consider: an electronic questionnaire and a face-to-face meeting, or a combination of the two.

A key step in the feedback collection system is the processing and analysis of the collected data and its use to achieve the objectives of the feedback collection.

Monitoring and evaluation system design: monitoring the quality and effectiveness of services

The SERVQUAL model is a model commonly used to measure service quality. The model is used to measure the difference between what people want and what they actually feel about the service they receive. The model helps to identify gaps in service delivery and opportunities to improve service delivery.

The model is based on the idea that customer views on five key dimensions - tangibility, reliability, responsiveness, assurance and empathy map - are the best predictors of service quality.

The model uses a questionnaire with paired statements for each category to see how good the service is. Customers are asked to rate their expectations and impressions of the service on a Likert scale that typically ranges from 1 (strongly disagree) to 7 (strongly agree). The rating gathers information about what customers expected and what they received. This allows expectations to be compared with reality and relevant gaps to be identified.

The model calculates the gap value for each measure by taking the average score for impressions and subtracting it from the average score for expectations. A positive gap score means that customers' impressions do not match their goals, indicating where changes need to be made.

Using the model, it is possible to identify where to focus efforts to improve service quality. It provides a way to measure and improve customer satisfaction and helps to understand and meet customer expectations.

The model is based on ten factors which together form a complete framework for assessing and improving service quality.

Material elements

- It is related to the setting in which the service is provided, including the facilities, equipment and appearance of the staff.

Reliability

- It focuses on the correct and reliable delivery of the services offered, including consistent performance and delivery of the service in accordance with the offer.

Ability to respond

- It measures how ready service providers are to help customers and how quickly they can respond to their needs or requests.

Communication

- It assesses the quality of communication between service providers and customers, including the clarity of information, the ability to listen actively and to provide the right information.

Credibility

- It assesses how trustworthy and honest the service provider is, covering competence, knowledge and ethical behaviour.

Security

- It focuses on how safe customers feel during service delivery. This includes privacy, financial security and physical security.

Competence

- It is related to the knowledge, skills and abilities of the service provider necessary for the successful implementation of the service.

Courtesy of

- It focuses on the courtesy, respect and friendliness that service providers show to their customers.

Understanding

- It assesses how well service providers understand customers' needs, preferences and standards and how well they tailor their services to meet those needs.

Availability

- It assesses how easy it is for customers to get the service, taking into account things like convenience, accessibility, and barriers or difficulties in getting the service.

In terms of the services provided by EDIH CASSOVIUM, individual factors may have different weights depending on the service group.

Table 17 - Significance of SERVQUAL model factors for quality and efficiency assessment

factor	the importance of the factor for assessing the quality of EDIH services			
	Group A	Group B	Group C	Group D
material elements	High	High	Low	Low
Reliability	High	High	High	Low
responsiveness	High	High	High	Low
Communication	High	High	High	High
Credibility	High	High	High	High
Security	High	High	High	Low
competencies	High	High	High	High
Courtesy of	Medium	High	High	Low
Understanding	High	High	High	Low
availability	High	High	Medium	Medium

Based on an evaluation of the individual factors, five categories of potential mismatch between the customer's needs and the provider's activities can be identified.

Knowledge mismatch

- a mismatch occurs when a provider doesn't know what its customers want and can't reach them in the right way.

Inconsistency in standards

- the provider has an idea of what the customer expects from the service the provider provides. If this idea is incorrect from the start and does not match what the customer wants, the organisation is likely to misrepresent this idea into quality policy and rules.

Inconsistency in the result

- can occur when the service provided differs from what the customer expected. It can also arise as a result of poor service delivery.

Miscommunication

- the provider's marketing communication can sometimes lead to customers having the wrong expectations of the service. It can also be the result of a provider promoting and offering services that it cannot actually provide.

Satisfaction gap

- caused by the difference between what the customer expects from the service and what the service actually delivers.

The method can be used for:

Service quality measurement

- customer evaluation of service quality. It helps to identify customer expectations in relation to the impression that the service creates. Quality

assessment can help detect service quality problems and suggest solutions.

Customer Satisfaction Assessment

- understanding customer satisfaction can contribute to customer retention and acquisition.

Improving and innovating services

- identifying opportunities for improvement. Improving customer perceptions can be achieved by assessing the differences between expectations and perceptions in each category. This facilitates service innovation and continuous improvement efforts.

Competitive benchmarking

- assessing the quality of services across providers in the same industry. Providers can determine their competitive position, strengths and weaknesses by measuring and comparing customer perceptions and expectations. This data can be used for the purpose of developing competitive strategies.

Training and development

- identifying staff training and development needs. Identifying the need for training is possible by examining the factors in which the service provider scores low.

Service restoration

- consideration of the process of restoring a service after an outage. The provider can evaluate the success of service restoration by comparing customer perceptions before and after a service outage. This helps to improve service restoration strategies.

Monitoring and evaluation of service quality using the SERVQUAL method requires effort on the part of the service provider (preparation of the questionnaire and evaluation and analysis of the answers) as well as on the part of the customer (time required to understand the questions and complete the questionnaire). It is therefore important to identify services, customers or situations where the use of the method is effective and efficient, i.e. the implementation of monitoring and evaluation will help in achieving the set objectives.

5.1.16 Legal aspects

From the point of view of the regulation of the legal relations relevant to the very existence of the consortium, the basic legal framework can be identified as the grant agreement concluded between the partners of the consortium and the European Commission (the competent department) and the contract establishing the consortium, not excluding the subsequent legislation to which the contracts in question refer. It should be stressed at this point that none of the contracts described has established the legal personality of the EDIH CASSOVIUM consortium, which, in

legal terms, is not a separate legal entity.

The grant agreement is concluded between the parties, which are the European Union represented by the European Commission, the project coordinator (TUKE) and the other beneficiaries (UPJS and KEITVA). The Grant Agreement also contains 5 annexes, which form an integral part of it. The terms and conditions of the agreement are divided into 6 chapters and form the core of the agreement. The key areas of regulation can be summarised as - aspects related to the grant in the broader context (amount, flexibility and implementation of the grant), rules of implementation, administration of the grant, consequences of non-compliance with the agreement, other consequences -damages and administrative sanctions, force majeure and final provisions.

The consortium agreement (also referred to as the consortium agreement) is a legally binding document between the parties representing the consortium partners - TUKE as the coordinator, UPJS and KEITVA as the beneficiaries. The object of this contract is to define the legal relationship that arises between the entities concerned for the purpose of creating the EDIH CASSOVIUM consortium, with predefined objectives. The most important areas of regulation are the responsibilities of the parties (including towards each other), the governance structure, financial issues, access to results, confidentiality of information, and others.

5.1.17 Data Protection Policy

The data protection policy for EDCASS should aim at data security and compliance with data protection regulations. The processing of personal data will be carried out on the basis of an agreement (contract) concluded between the partners of the consortium, who will act as joint controllers in accordance with Section 33 of Act No. 18/2018 Coll. on the Protection of Personal Data and on Amendments to Certain Acts (hereinafter referred to as "the Act").

Pursuant to Section 33(1) of the Act, two or more controllers are joint controllers who determine by agreement the purpose and means of the processing of personal data. In the agreement, they are also obliged to determine transparently the responsibility of each of them for the performance of their duties and tasks under this Act, in particular as regards the exercise of the rights of the data subject, and their obligations to provide information pursuant to Sections 19 and 20, unless these obligations of the controller are laid down by a special regulation or an international treaty to which the Slovak Republic is bound. The agreement shall also designate a contact point for the data subject.

Pursuant to Article 33(2), the controller is obliged to provide the data subject with the

essential elements of the agreement referred to in paragraph 1, in particular the identification of the parties, the subject matter of the agreement, the duration of the agreement, the provisions governing the exercise of the data subject's rights, the obligations of controllers to provide information pursuant to Sections 19 and 20 of the Act, and the point of contact for the data subject.

Pursuant to Article 33(3) of the Act, the data subject may, notwithstanding the terms of the agreement referred to in paragraph 1, exercise his or her rights with and against each controller.

An agreement within the meaning of Section 33 of the Act entered into for the purpose of processing personal data for the purposes of EDIH CASSOVIUM should regulate the processing of personal data and regulate the key aspects of the processing of personal data to ensure compliance with the principles of data protection and to clearly define the responsibilities of each party involved.

The agreement should bind the parties to respect and limit the processing of personal data, only for specified purposes and in a specified manner. The agreed processes, purposes, etc. will need to be reflected in the personal data processing policy so as to ensure transparency of processing.

The basic elements that should be included in the agreement are:

- the establishment of common purposes for the processing of personal data,
- establishing the legal bases for these purposes,
- determining the scope of the personal data processed for each purpose,
- setting out the form of collection of personal data and the responsibilities of each party,
- Establishing the process for sharing personal data and the responsibilities of the different parties (the proposal is outlined in the process and thus we propose the creation of a single shared dataset),
- Determining the repositories of personal data (presumably the site server and Sharepoint),
- setting rules and limits on access to personal data,
- establishing organisational and technical security measures to ensure the protection of personal data,
- setting out the process and responsibilities for the retention and deletion of personal data,
- defining the processors of personal data (probably Microsoft as Sharepoint provider, while it is necessary to check the conditions and access of third parties to all repositories that will be used for the needs of EDIH CASSOVIUM),
- Setting out the process and responsibilities for dealing with requests to

exercise the rights of data subjects (the policy is currently structured to include details of the relevant staff members of the consortium dealing with the issue once the data has been completed. However, a process needs to be established that will be used if the data subject does not address the request to the correct member of the consortium. It is also necessary to set out the obligations and to use the form on the EDIH CASSOVIUM website to send the request).

- setting out the process and responsibilities for managing incidents and data breaches; and
- establishing the obligation to keep records of EDIH processing activities, for each of the purposes.

The Privacy Policy is processed as a separate annex to this document and includes:

- the purpose of the policy,
- the types of data that the Hub will collect, process and store and the purposes for which it will be used, how individuals' consents to the processing of personal data are to be obtained,
- data processing,
- data storage,
- data sharing,
- accessing and correcting data and securing data.

5.2 WP2: EDCASS process design and design

5.2.1 Organisational structure of EDIH CASSOVIUM - positions

Table 18 - Positions in the organisational structure of EDIH CASSOVIUM

Position	Partner	WP	Task
General Project Manager	TUKE	WP1	Manager leads and ensures the overall implementation of the project
Partner Lead TUKE	TUKE	WP1	It ensures coordination and implementation of activities within TUKE and communication with partners.
Partner Lead UPJS	UPJS	WP1	It ensures coordination and implementation of activities within UPJS and communication with partners.
Partner Lead KEITVA	KEITVA	WP1	It ensures the coordination and implementation of KEITVA activities and communication with partners.
Project Financial Manager	TUKE	WP1	Responsible for the accurate and efficient financial management of the project in accordance with the grant agreement, the consortium agreement and EU and national legislation.
Finance Manager	UPJS	WP1	Manager for financial management at UPJS
Finance Manager	KEITVA	WP1	Financial management in KEITVA

Position	Partner	WP	Task
Project Assistant	TUKE	WP1	Responsibility for administrative tasks and project work, day-to-day implementation of the project, support of the project team at the coordinator Administrative staff
Project Assistant	UPJS	WP1	Assistant providing general support to the project partner team
Project Assistant	KEITVA	WP1	Assistant providing general support to the project partner team
Digitalisation Advisor (junior advisor)	TUKE	WP1	Consultancy, advice and expert support in the field of digital transformation and technology
WP2 Leader (senior advisor)	TUKE	WP2	Responsible for the overall implementation of the WP concerned, monitoring and evaluation, interface to other WPs
Strategy Advisor (senior advisor)	TUKE	WP2	Participation in the design of the organisational structure of EDCASS, the establishment of its strategic bodies, the development of the EDCASS sustainability strategy, advice and expert feedback in the development of the EDCASS operating model
Strategy Advisor (senior advisor)	UPJS	WP2	Participation in the design of the organisational structure of EDCASS, the establishment of its strategic bodies, the development of the EDCASS sustainability strategy, advice and expert feedback in the development of the EDCASS operating model
Strategy Advisor (senior advisor)	KEITVA	WP2	Participation in the design of the organisational structure of EDCASS, the establishment of its strategic bodies, the development of the EDCASS sustainability strategy, advice and expert feedback in the development of the EDCASS operating model
Digital Transformation Portfolio Expert (senior expert)	TUKE	WP2	Participate in the description of the customer journey approach, service delivery model, product and resource lifecycle and management
Digital Transformation Portfolio Expert (senior expert)	UPJS	WP2	Participate in the description of the customer journey approach, service delivery model, product and resource lifecycle and management
Digital Transformation Portfolio Expert (senior expert)	KEITVA	WP2	Participate in the description of the customer journey approach, service delivery model, product and resource lifecycle and management
WP3 Leader (senior advisor)	UPJS	WP3	Responsible for the overall implementation of the WP concerned, monitoring and evaluation, interface to other WPs
EDCASS Operation Manager (Project Manager)	TUKE	WP3	Coordination of service delivery, including the establishment of service delivery through the EDIH network
Service Manager (technical staff)	TUKE	WP3	Responsible for managing the process of delivering a service to a specific customer according to defined processes and customer journey.
Service Manager (technical staff)	UPJS	WP3	Responsible for managing the process of service delivery to a specific customer, according to defined processes and customer journey
Service Manager (technical staff)	KEITVA	WP3	Responsible for managing the process of service delivery to a specific customer, according to defined processes and customer journey

Position	Partner	WP	Task
WP4 Leader (senior advisor)	UPJS	WP4	WP4 (T4.1-T4.3) / Responsible for the overall implementation of the WP concerned, monitoring and evaluation, interface to other WPs
Event Manager (technical staff)	KEITVA	WP4	Responsible for organising events for stakeholders, EDCASS partners and relevant European networks
Corridor Officer (technical staff)	TUKE	WP4	Responsible for collaboration and corridor development with other EDIHs, EDIH Thematic Networks and the EDIH Network
WP5 Leader (senior advisor)	KEITVA	WP5	Responsible for the overall implementation of the respective WP, monitoring and evaluation, interface with other WPs
Event Manager (technical staff)	KEITVA	WP5	Dissemination, marketing and promotion activities of the EDCASS project and services, organisation of events
Communication Specialist (technical staff)	KEITVA	WP5	Participation in the preparation of the Dissemination and Communication Plan, advising on EDCASS branding, communication and promotion activities, dissemination

5.2.2 EDIH CASSOVIUM digitisation services

Call for service requests

EDIH CASSOVIUM will provide services to entities that so request, as per the call published on its website. The call for service requests from EDIH CASSOVIUM is based on the document:
"Call for applications for de minimis aid to support digitalization under the Scheme of de minimis aid from the Slovak Republic Recovery and Resilience Plan to support digitalization, micro, small and medium-sized enterprises, small companies with medium market capitalization and public sector organizations, as amended by Appendix No. 1" (hereinafter referred to as "Scheme DM 16/2022 as amended by Appendix No. 1.")

The call under the DM 16/2022 Scheme falls under Component 17: Digital Slovakia (State on the Move, Cyber Security, Fast Internet for Everyone, Digital Economy) of the Slovak Republic's Recovery and Resilience Plan (hereinafter referred to as the "RRP"), Investment 3: Engaging in cross-border European projects ("multi-country projects") leading to building the digital economy.

The call is aimed at providing minimum assistance from ODA funds to support the digitisation of micro, small and medium-sized enterprises, small companies with a medium market capitalisation and public sector organisations through European Digital Innovation Hubs. The implementation of the activities and the provision of services are funded by the ODA mechanism (50 %) and by the directly managed Digital Europe Programme (50 %).

In relation to services and their provision, the Call provides in particular:

- Conditions for the granting of aid defining the eligibility of operators

- Type of assistance provided, reflecting the nature of the service
- Amount of aid granted

Conditions for granting aid

The call is open to applicants who meet the following conditions:

- is an undertaking, i.e. an entity which carries out an economic activity and is a participant in competition, regardless of its legal form and method of financing. An economic activity is any activity which consists in offering goods and/or services on the market,
- is a single undertaking within the meaning of Article 2(2) of Commission Regulation (EU) No 1407/2013,
- is an enterprise that meets one of the following enterprise size categories :

Table 19 - Size categories of entities eligible to receive the service

	Number of employees	Annual turnover (max)	Total annual balance (max)
Micro enterprise	0 - 9	2 mil. EUR	2 mil. EUR
Small business	10 - 49	10 mil. EUR	10 mil. EUR
Medium enterprise	50 - 249	50 mil. EUR	50 mil. EUR
Small mid-market company	0 - 499	100 mil. EUR	86 mil. EUR

- or is a public sector organisation (hereinafter referred to as PSO) which will use the aid for economic purposes. An SNE is a legal entity entered in the statistical register of organisations which is classified in the general government sector in accordance with the ESA 2010 European methodology established by Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union and is a large enterprise in terms of size category,
- the maximum amount of de minimis aid granted to it (including all members of a group of undertakings forming a single undertaking with the applicant) during a period of two consecutive fiscal years has not exceeded 200 000 EUR including from other providers or under other de minimis aid schemes. The applicant may be granted de minimis aid up to a maximum of the difference between 200 000 EUR and the amount of de minimis aid received over the last three consecutive fiscal years,
- it is not an undertaking subject to the recovery of State aid following a decision

of the European Commission declaring such State aid unlawful and incompatible with the internal market. Nor can State aid be recovered on the basis of a decision of the European Commission declaring such State aid unlawful and incompatible with the internal market in respect of members of a group of undertakings which form a single undertaking with the applicant,

- is a company that does not operate in the following sectors of the Slovak economy:
  a) in the fisheries and aquaculture sector covered by a specific regulation,
  b) in the processing and marketing of fishery and aquaculture products, where the amount of aid is fixed on the basis of the price or quantity of the products purchased or marketed,
  c) in the primary production of agricultural products,
  d) in the sector of processing and marketing of agricultural products, in the following cases:
     - where the amount of aid is fixed on the basis of the price or quantity of such products purchased from primary producers or placed on the market by the undertakings concerned,
     - where the aid is conditional on being partly or wholly passed on to primary producers,
  e) in activities related to exports to third countries or Member States, namely assistance directly linked to the quantities exported, for the establishment and operation of a distribution network or other current expenditure linked to the export activity,
  f) in activities that are conditional on a preference for the use of domestic over imported goods,
  g) in activities related to the implementation of road freight transport for hire or reward.

- the service for which he/she is applying under this call has not been provided by another ECDI provider or its partners.

Type of aid granted

The applicant may apply for non-financial support free of charge by providing:

- An individual service to be provided to one beneficiary under a contractual relationship,
- A group service that will be provided to multiple beneficiaries as part of a mass event. A mass event is defined as an organised training session, workshop, conference, mass consultation or other activity involving several beneficiaries.

Amount of aid granted

The amount of aid granted will depend on the type and type of service to be provided to the beneficiary. The call for proposals includes a determination of the value of the services. The applicant has the possibility to choose from the catalogue the service according to his requirements and needs. Subsequently, on the basis of the identification of the specific service, the amount of de minimis aid is to be determined.

The resulting amount of aid granted is half of the unit price for the service (the value of the service as indicated in the service catalogue), as the aid intensity of the mechanism is 50 %, as Digital Europe funds do not constitute such aid.

The resulting amount of de minimis aid granted will be included in the maximum possible aid ceiling for a single undertaking and will be registered in the SEMP IS register.

Groups of services

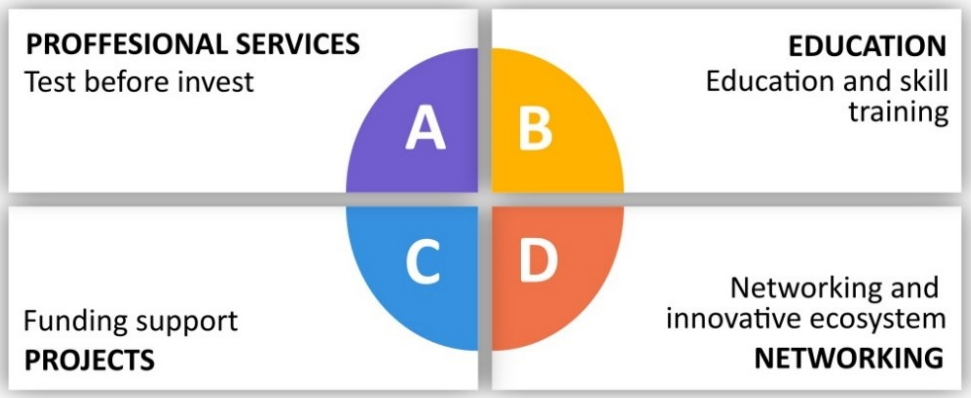


Image 11 - EDIH CASSOVIUM service groups

The main functions of EDIH are reflected in service groups and can be defined as follows:

- **Service Group A** - Testing Innovative Technologies, Digitisation and Automation (Test Before Invest - TBI) is a group of services that includes awareness raising, digital maturity assessment, demonstration activities, digital transformation visions, integration support, technology adaptation, testing and experimentation with digital technologies (software and hardware), knowledge and technology transfer. Particular emphasis is placed on key technologies supported by the Digital Europe Programme: the use of Artificial Intelligence (AI), High Performance Computing (HPC) and Cyber Security. This group of services has the largest representation in the EDIH CASSOVIUM service portfolio, as a result of the specialisation and expertise base of the

consortium. This is the group of services whose provision is the primary objective of EDIH CASSOVIUM.

- **Service Group B** - Skills Training & Development (S&D) is a group of services aimed at ensuring an appropriate level of digital skills within supported organisations to make the best use of digital innovation technologies. These services should include promotion, the provision of premises to organise or deliver training, the organisation of boot-camps, internships, as well as support for the delivery of short training courses for advanced digital skills and work placements prepared as part of the Digital Europe: Advanced Digital Skills pillar of the Digital Agenda.
- **Service Group C** - Support to Find Investment (S2FI) is a service group that includes access to financial institutions and investors, support to use the Invest EU facility and other relevant financial mechanisms, in close cooperation with the planned InvestEU Advisory Hub and the Enterprise Europe Network (EEN). For the public sector, which is one of the largest purchasers of ICT, this service could provide support to increase the purchasing power of the public sector and transform it into a large purchaser of innovation.
- **Service Group D** - Innovative Ecosystem & Networking (IE&N) includes the role of EDIH as a facilitator of contacts between end-users and potential suppliers of technological solutions, for example for experimentation and testing purposes, or between PSO and GovTech companies to foster collaboration. The non-profit nature of EDIH is important in terms of supporting local players, in order to strengthen their economic power and the local economy as a whole. If suitable local partners are not found, the centres can link up with other EDIHs to find a suitable partner elsewhere in Europe. A prerequisite for the success of this EDIH function is a regular technology search to map the innovation ecosystem and understand needs and opportunities. Structured relationships with regional authorities, industry clusters, SME associations, business development agencies, incubators, accelerators, the Enterprise Europe Network, EIT (European Institute of Innovation and Technology) co-location centres and chambers of commerce greatly assist the EDIH's brokering function.

Areas of specialisation of partners

Areas of specialization of individual partners of the consortium are in the case of TUKE and UPJS determined by the areas of education provided and in the case of KEITVA by the role it performs in accordance with the consortium agreement.

The areas of education and research provided by individual universities are defined by

the study programme of individual faculties as follows:

TUKE provides education and conducts research through the following faculties and departments:

- Faculty of Economics,
- Faculty of Mining, Ecology, Management and Geotechnology,
- Faculty of Electrical Engineering and Computer Science,
- Faculty of Materials, Metallurgy and Recycling,
- Faculty of Arts,
- Faculty of Production Technologies,
- Faculty of Aviation,
- Faculty of Mechanical Engineering and
- Faculty of Civil Engineering,
- Institute of Computing,
- University Science Park TECHNICOM.

UPJS provides education and conducts research through the following faculties:

- Faculty of Medicine,
- Faculty of Arts,
- Faculty of Law,
- Faculty of Public Administration,
- Faculty of Science and
- Institute of Physical Education and Sport.

KEITVA aims to create conditions for the development of the IT industry and improve the quality of life in Eastern Slovakia, focusing its activities on education, innovation and cooperation.

Professional and content coverage of services

The following table summarises the coverage of the service groups provided by EDIH CASSOVIUM by each EDIH CASSOVIUM Partner ("EDIH Partner"). The numbers in following table represent the number of services provided by EDIH Partners under each service group. In the inception phase of the project, 160 services were identified by the EDIH CASSOVIUM partners as having the potential to increase the digital maturity of clients. The services were catalogued in a service catalogue.

Table 20 - Coverage of service groups by EDIH CASSOVIUM partners

EDIH service groups					
Provider	**Group A**	**Group B**	**Group C**	**Group D**	**Together**
TUKE	69	56	1	3	129
UPJS	9	15	1	3	28
KEITVA	0	2	1	0	3
Together	78	73	3	6	160

Table shows the following:

a) Most of the services listed in the catalogue are provided by TUKE. In total there are 129 services (80% of all services). It is followed by UPJS with 28 services (almost 18% of all services) and KEITVA with 3 services (less than 2% of all services).
b) Most of the services listed in the catalogue are provided in the area of testing innovative technologies, digitisation and automation (78 services), followed by training and skills building (73 services). 3 services are provided in the area of support for sourcing funding and 6 services are provided in the area of networking and innovation ecosystem.
c) In the field of testing innovative technologies, digitalization and automation (78 services in total), 69 services are provided by TUKE and 9 services by UPJS.
d) In the field of education and skill building (73 services in total), 56 services are provided by TUKE, 15 services by UPJS and 2 services by KEITVA.
e) In the area of support for sourcing funding (3 services in total), all partners provide one service each.
f) In the area of networking and innovation ecosystem (6 services in total), TUKE and UPJS provide three services each.

In terms of the number of services provided within each EDIH service group, the lowest representation is in the area of support for sourcing funding (3 services provided) and in the area of networking and innovation ecosystem (6 services provided).

Sourcing investment represents an important step for EDIH customers in the process of adopting digital technologies. Once the digital technology has been successfully tested and a decision has been made to make the investment, it is necessary to identify the sources from which the investment will or can be funded. In case of lack of own resources or unavailability of commercial credit, the SME should be able to approach EDIH to identify possible sources of funding for the investment, e.g. using EU funds. If EDIH does not have the necessary capacity and expertise to identify or broker suitable sources of funding, this could have a detrimental effect on EDIH's activities in the form of a decline in interest in both pre-investment testing and digital technology education

and skills.

The networking and innovation ecosystem is an important tool for identifying and then collaborating with potential suppliers of technology solutions for use in pre-investment testing as well as training and skills building.

Networking creates the preconditions for expanding the availability of services in the use of digital technologies, which are not the subject of EDIH CASSOVIUM's activities. This opens up opportunities for SMEs operating in the EDIH CASSOVIUM region to access the required technologies or services that are not in the EDIH CASSOVIUM portfolio.

Pricing of services

The prices of the services in the EDIH CASSOVIUM portfolio are set to cover the direct costs of the individual EDIH CASSOVIUM partner sites for the provision of the services and part of the other costs of the project, i.e. the costs associated with the EDIH CASSOVIUM activities.

The part of the price of each service that is intended to cover the direct costs of each site for the provision of the service has been determined by the site concerned and covers all the direct and indirect costs of the particular site associated with the provision of the service. This part of the price has been established on the basis of an expert estimate based on the estimated need for the time of the relevant experts, the estimated need for technical equipment and the estimated consumption of materials.

The final price of each service is determined by adding a mark-up of 1.38776 times the direct cost to the portion of the price intended to cover direct costs to cover other project costs.
The prices of the individual services in the EDIH CASSOVIUM portfolio, as set, are not out of line with market standards for comparable, commercially provided services.

Catalogue of services

For the purpose of practical and clear orientation in the EDIH CASSOVIUM services, an online catalogue has been created, bringing together the services created by all the consortium partners or their expert departments.

The catalogue can be accessed from the official web portal of the EDIH CASSOVIUM project in two ways, either by a direct link in the form of the "**SERVICES CATALOGUE**" button from the main homepage of the EDIH CASSOVIUM project, or by the "FROM OUR CATALOGUE" button on the "SERVICES" sub-page, which provides more information

about the services, the scheme for requesting services and the process of service provision itself.

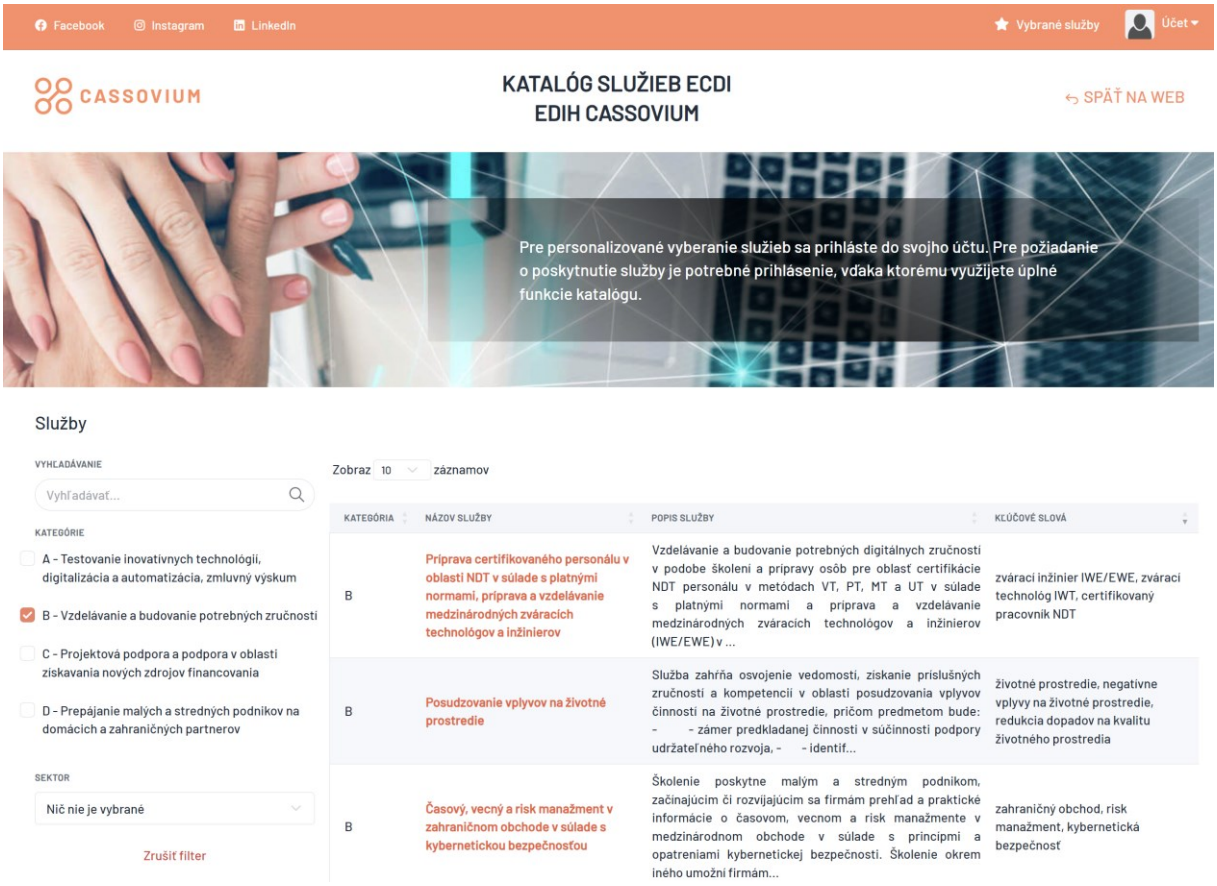


Image 12 - Homepage of the EDIH CASSOVIUM online service catalogue

Catalogue interfaces by user involvement

The catalogue has four different interfaces available, providing a spectrum of different activities depending on the type of user involvement:

- **Public mode** - basic browsing mode for public viewing of the catalogue without registration or login,
- **Entity mode** - public viewing of the catalogue with logging into a client account, which launches a number of functionalities for potential service subscribers, including registration of their entities and completion of relevant administrative documents,
- **Editor mode** - the professional guarantor of the service content creates or modifies the service, its description, parameters, price levels, etc.,
- **Admin mode** - comprehensive access to the entire catalogue, its source data and all functionalities (developer level).

Catalogue functionalities from the perspective of service provision administration

The most important functionalities of the online catalogue of EDIH CASSOVIUM services from the point of view of administration are:

- **registration** – creating a client account for an entity (SME or public sector organisation),
- **browsing the catalogue** – viewing services and their descriptions
- **selection of favourite services** – adding services to the favourite services basket of the logged-in subject
- **completion of questionnaires** – electronic questionnaires that the subject completes as a prerequisite for the administration of the provision of each service,
- **process graphics of documents** – tracking the status of completion of questionnaires,
- **document creation** – turning completed questionnaires into documents ready for signing,
- **filtering of services by groups** – display of services of individual groups (A,B,C,D) according to point 2.1 of this document,
- **search by text string** – fulltext search by specified text string (keyword, part of service name, etc.)

Description of services in the online catalogue

Each service is described in the public version of the catalogue in the form of explanatory fields that inform potential beneficiaries about the scope, parameters and conditions or predispositions of the service provision. These fields are described in the table below.

Table 21 - service description fields

field name	the meaning of the field
Name of service	a specific and unique service name
Keywords	expressions that convey the point of the service or the content areas of the service
Service description	a more detailed textual description of the service, its content and the intended method of delivery
Sectoral focus	specification of the sectors in which the service is expected to be provided and its outputs implemented
Technological focus	the technological nature of the service, or the area to which the service belongs
Target group	for whom (what subjects) the service is intended
Capacity	the annual capacity of the providing establishment
Terms and Conditions	the conditions and prerequisites for provision (technical prerequisites, readiness of the entity and persons, etc.)
Price level	1-3 levels of service value (in the selected one of them the service is provided)
Description of price level	an explanation of the expected content and scope of the service within the relevant price level

List of services

The table of the list of services in **Annex 1** of this document provides an alphabetical list of the services published in the online catalogue that can be requested by individual entities. These are the services in each service group prepared by all consortium partners or their departments. The table also shows the published catalogue value of the services.

In the course of the pilot project, based on the needs and experience generated, the catalogue is expected to be modified in terms of adding or editing services and their price levels. The update of the catalogue is subject to the approval and information of both project funding parties, i.e. the relevant EC entity and the relevant MIRRI section.

Updating the portfolio of services

The portfolio of EDIH CASSOVIUM services currently consists of 160 services divided into 4 groups among the 3 partners of the consortium, where for each of the services a maximum capacity has been set in the form of the number of services that a partner is able to provide over a certain period of time (most often a year).

The portfolio of services and the maximum capacity to provide each service shall take into account the capabilities, skills, experience and capacity of each partner at the time of listing the services offered. It is natural that capabilities and experience evolve and change over time. In the same way, the capabilities and capacity of partners may change over time, which may be reflected in the portfolio of services (new services may be added, existing services may be reduced) as well as in the capacity, i.e. the number of services that a partner is able to provide in a given period of time.

The prices of the services are set to cover the direct costs of the individual EDIH CASSOVIUM partners' sites for the provision of the services and a part of the costs of the other costs of the project, i.e. the costs associated with the EDIH CASSOVIUM activities.

The starting point for pricing shall be the direct costs of providing the service as quantified by the relevant department. These costs shall cover all direct and indirect costs of the specific site associated with the provision of the service. This part of the price has been established on the basis of an expert estimate, based on the anticipated need for the time of the relevant experts, the anticipated need for technical equipment and the anticipated consumption of materials.

The portfolio of services and the quantification of the cost of these services shall be

based on the situation at the time of preparation of the list of services.

Once EDIH CASSOVIUM starts to actually provide specific services, it can be expected that one or a combination of the following situations will arise:

1. **the portfolio of services is expanded as a result of additional skills**, **competences** or technical equipment being added to a particular site (supply-driven portfolio expansion),
2. **the portfolio of services will be expanded in response to customer demand** (demand-driven portfolio expansion),
3. **the portfolio of services is narrowed due to the inability of a site to** provide a particular service (loss of a key expert, failure or decommissioning of equipment or a site capable of providing a particular service) (supply-driven portfolio narrowing),
4. **the actual cost of providing the service is higher than** the cost quantified by the department concerned,
5. **the real cost of providing the service is lower than** the cost quantified by the department concerned.

A mechanism needs to be established to update the portfolio of services on a regular and ad hoc basis.

The specialists responsible for the provision of each service will be required to inform the other partners through designated coordinators:

1. well in advance (as soon as practicable) of an expected failure of the service listed in the service list,
2. immediately of an unexpected interruption in the provision of a service listed in the list of services and of the date of its expected restart,
3. well in advance of the planned launch of a new service that could be included in the EDIH CASSOVIUM service portfolio,
4. the identified potential service that could be included in the EDIH CASSOVIUM service portfolio in order to increase the attractiveness of EDIH CASSOVIUM activities.

On the basis of the above information, the list of services provided by EDIH CASSOVIUM will need to be continuously updated.

Specialists responsible for the provision of individual services, service managers and other persons working in the organisational structure of EDIH CASSOVIUM who come into contact with customers or potential customers will be obliged to inform other partners through designated coordinators about requests from customers or potential customers for the provision of services that are not included in the portfolio of services provided by EDIH CASSOVIUM. Based on the analysis of the information collected and

in consultation with the relevant partners that have the potential to provide the identified services, the project team will decide on the inclusion of the new services in the list of services provided by EDIH CASSOVIUM.

In order to ensure that the prices of the services provided are realistic in relation to the cost of providing them, it is necessary to ensure that the individual partners or departments responsible for providing the services keep detailed track of the actual staffing, time, technical, material and administrative requirements of the individual services. The monitoring and evaluation of the intensity of the services should be ensured after each service has been provided in order to quantify the variations between the estimated costs (according to the contract concluded with the customer) and the actual costs and to identify the reasons for these variations.

In the event that the actual cost of providing the service is at least 10% higher than the estimated cost, an update of the price list for the service should be arranged as soon as possible.

If the actual cost of providing the service will be at least 10% lower than the estimated cost, the impact of the service price adjustment on the achievement of the set project KPIs should be analysed before updating the price list.

In the case of the most frequently used services, it is advisable to compare the cost or price of the service provided by EDIH CASSOVIUM with the market benchmark.

Monitoring the actual costs of services, their translation into price and comparison with the market benchmark has an impact on the sustainability of the project in terms of ensuring the competitiveness and attractiveness of the services provided by EDIH CASSOVIUM or individual partners.

5.3 WP3: EDCASS activity (service provision)

5.3.1 Customer journey

The Customer Journey contains a detailed description of the processes that are used, both partially and as a whole, for the provision of services to Authorised Entities by EDIH CASSOVIUM (hereafter referred to as EDCASS).

When reading and implementing the customer journey, the following should be taken into account:

- the overall complexity of EDCASS as a project and therefore the interconnectedness of the individual work processes,
- striving for universality of the customer journey created, while not necessarily reflecting in detail all the facts related to the individual cases of service request, nor the specific situation, environment and conditions in which the service was provided,
- the pilot character of the project, which implies the possibility of adjustments and development of the contained processes if this results from their practical implementation.

The 8 steps of the customer journey are described in the following paragraphs, with some of these steps divided into parts.

Step 0 - Information

Communication with the service seeker is preceded by informing them about EDCASS activities and services, eligibility and other relevant topics, through:

- Web site www.edihcassiovium.sk,
- Social networking sites: Facebook, Instagram, LinkedIn - on EDCASS accounts,
- Events in which EDCASS is presented. The interested party can find information about the events prepared and held on the EDCASS side on the web and social networks,
- Third-party references (partners and acquaintances, members of the regional ecosystem, etc.),
- Advertising elements in physical space (billboard).

Information on the EDCASS website includes:

- Basic information about the EDIH concept and links to the Slovak and European EDIH network,
- Information about the consortium that makes up EDCASS and its members,
- Information on the processes that need to be completed for project

implementation of services,

- Information and link to the Scheme of de minimis aid from the funds of the Recovery and Resilience Plan of the Slovak Republic to support the digitalization of micro, small and medium-sized enterprises, small companies with medium market capitalization and public sector organizations - Scheme DM -16/2022 as amended by Appendix No. 1 (hereinafter referred to as the De Minimis Scheme),
- Information on the Call for applications for the use of state aid under the De Minimis Scheme.

Step 1 - Contact

After obtaining the initial information, the interested party contacts EDCASS by e-mail (info@edihcassovium.sk) or by telephone using the contact details published on the website. Based on his/her request, a communication with one of the Service Managers involved in the WP3 process will take place. The communication may take place as agreed with the applicant in the form of:

- phone conversation,
- email communication,
- video conference call,
- a personal meeting at the EDCASS premises,
- personal meeting with the customer.

The aim of this step is to provide more detailed information about the concept of EDIH, or more specifically EDCASS, about the possibility of using digitization services, as well as to present the catalogue of services and to make available information on the eligibility of entities requesting services.

The interested party is informed about the financing of the project from the point of view of the European Commission and the Slovak Republic, from which further information about the provision of assistance under the so-called "European Commission" is provided. The information on the aid under the Slovak Recovery Plan and the related de minimis scheme.
The interested party has the opportunity to consult the Catalogue of Services, in which the services are listed with their name and detailed information related to their provision. The catalogue will also include, where appropriate, information on the availability/unavailability or state of readiness of individual services, updated from time to time.

In addition to the above content, EDCASS staff will endeavour to ensure that any further questions from potential candidates are answered.

The subject registers as a service seeker in the EDCASS portal (associated with the catalogue) at https://sluzby.edihcassovium.sk/ - Account - Create new account.

Registration of the subject and its EDCASS account is the first prerequisite for its administration in terms of service provision.

Step 2 - Choosing a service

Part 2a - DMA 0

The first part of this step is to use the Digital Maturity Assessment (DMA) tool in assessing the need for and type of digitalisation and in assessing the suitability of specific services to increase the digital maturity of the entity. The interested party completes a questionnaire regarding the digital maturity of their entity or organisation. The purpose of the questionnaire is to determine the current digital maturity of the entity. The questionnaire will be completed electronically by the applicant, who will contact EDCASS Service Managers if he/she needs professional guidance in completing it.

Based on the DMA T0 result (the T0 is used for the level of digital maturity at the initial stage, i.e. before the service is provided), the applicant selects a service from a catalogue published on the web, so that the provision of the service increases the digital maturity of the entity and makes it more competitive in the market. The DMA T0 is filled in by each applicant, even those who know which specific service they are interested in (a prerequisite for creating the potential for evaluating progress over time).

Part 2b - Choice of service

The service can be selected by the applicant himself or in consultation with the service provider (EDCASS). Each service is provided in different levels (usually three) according to its scope, which corresponds to the different price levels of the service.

The interested party has the opportunity to choose services from the following 4 groups:

A. Testing innovative technologies, digitalization and automation;
B. Education and skill building;
C. Support for obtaining sources of funding;
D. Networking and innovation ecosystem.

Step 3 - Request a service

Part 3a - Application
The request is made by the entity to confirm the applicant's interest in the service and its provision with the use of state aid under the de minimis scheme. The potential beneficiary expresses his/her interest by submitting a document:
"Application for de minimis aid to support digitisation under Scheme DM - 16/2022 as amended by Appendix No 1"

The application document, as well as all other documents, is submitted by the entity by completing a questionnaire and then signing a physical version of the document.

Part 3b - Declarations
Together with the application, the entity shall submit:

- Declaration on the size of the undertaking
- Declaration for a single undertaking
- Declaration of Integrity

All the elements required from the interested party are described in the Call for applications for de minimis aid in indirect form through EDCASS services (hereinafter referred to as the Call) published on the portal www.edihcassovium.sk.

Step 4 - Service Refinement

The selection of a specific service is followed by specification of the conditions, terms and method of implementation, i.e. delivery of the service. EDCASS invites the contractor department that provides the service to participate in the communication. A memorandum of the meeting is drawn up, which serves as the basis for the preparation of the Service Contract (hereinafter referred to as the Contract) in terms of all the professional, date, overhead and technical contexts. It is important that all parties involved in the joint consultation or subsequent communications define as far as possible their needs, possibilities, requirements and conditions related to the implementation of the service, as well as all necessary resources, expected inputs and outputs, data, etc.

Step 5 - Contract the service
Part 5a - Contract Customization
On the basis of the minutes of the previous consultations, a draft service contract is being prepared and is in the process of being customised, i.e. adapted to the specific implementation conditions and situation. The contract is then sent for comments to the requesting entity and to the providing site.

Part 5b - Signing of the service contract
The service contract concluded between the service provider (EDCASS) and the recipient (an entity, i.e. an SME or a public administration body) shall contain the name of the service, its scope, price level, timing and all other relevant data characterising the process of its implementation. The signing of the service is entirely the responsibility of the providing consortium partner.

Part 5c - Publication of the contract in the central register of contracts
As a rule, the day after the contract is signed, it is published in the Central Register of Contracts. The day after publication, the contract enters into force and the service is deemed to have been granted from the point of view of State aid. This fact will be taken into account by EDCASS in the State aid registration system IS SEMP at the latest within 5 working days of the entry into force of the contract.

Step 6 - Service Implementation

In accordance with the terms of the contract, the actual provision and acceptance of the service takes place. The timeframe of this step (one-off provision or delivery/time interval/periodicity) is individual, depending on the terms and conditions agreed for the specific service and the specific case of its provision.

The service provider, in cooperation with the delivery department, ensures the professional and technical quality of the provided content, the service recipient is helpful and actively supports the implementation of the service.

Step 7 - Termination of service

Part 7a - Confirmation of service delivery
The supplying site shall confirm the delivery of the service according to a template prepared by the provider. If necessary, it shall supply or provide relevant documentation.

Part 7b - Acknowledgement of receipt of service
The recipient entity shall acknowledge receipt of the service by signing the form prepared by the provider. If necessary, it shall supply or provide relevant documentation.

Part 7c - Feedback
Based on the communication with the delivery site and the beneficiary, feedback is requested from both these parties in the form of an electronic questionnaire. The parties involved have the opportunity to express their opinion on the course of the service provision, compliance with the terms of the contract, etc. This questionnaire

serves to improve the quality of other services provided by the EDCASS consortium.

Part 7d - Certificates of service

EDCASS issues a certificate of receipt of the service to the receiving entity and a certificate of delivery of the service to the supplying site.

Step 8 – Conclusion

Part 8a - DMA T1

An assessment of the digital maturity of the recipient entity is repeated one year after the service has been provided. DMA T1 findings are compared with DMA T0 values, the output of the comparison potentially recording progress in digital maturity. The aim of DMA T1 is to determine what impact the provision of the service has had on increasing the digital maturity and competitiveness of the entity.

Part 8b - Publicity

Further activities of EDCASS include marketing activities leading to the highest possible promotion of the EDIH project in order to improve the accessibility and use of the services offered and to contribute as much as possible to the development of the region through digitisation. To this end, the recipient of the service shall agree or disagree to the inclusion of its specific service case in the publicity programme of the project.

Part 8c - DMA T2

The assessment of the digital maturity of the recipient entity is repeated two years after the provision of the service. DMA T2 findings are compared with DMA T0 and DMA T1 values, the output of the comparison potentially recording progress in digital maturity. The aim of DMA T2 is to determine what impact the provision of the service has had on increasing the digital maturity and competitiveness of the entity in the long term, or in terms of sustainability.

5.3.2 Customer journey spreadsheet

The graphical (tabular) treatment of the customer journey provides a view of all the anticipated activities on the part of the entity, whether it is a small and medium-sized enterprise (SME) or a public sector organisation (PSO).

The table reflects a standard customer journey composed of expected steps, while individual cases and situations related to specific service delivery cases may differ in relation to the specifics of the entity or case.

Table 22 - Tabular representation of the customer journey

#	STEP	PART	VERIFICATION	SUBJECT ACTIVITY	FORM	OUTPUT
0	INFORMATION			finding out information about EDIH services, their provision and the call	web, social networks, contacts, meetings, ecosystem	Website, social networks, call
1	CONTACT	EDCASS ACCOUNT REGISTRATION	▪ company size ▪ a single company ▪ de minimis limit ▪ AFDVT control ▪ verification record ▪ IS SEMP + EDIH SK ▪ decision	communication with EDIH, interest in information, registration on the portal	phone calls, emails, meetings	database of subjects
2a	CHOOSING A SERVICE	DMA T0		evaluation of the subject's digital maturity	digital questionnaire	questionnaire results
2 b		SERVICE SELECTION		choosing of a specific service from the catalogue, verification of the possibility of provision	online catalogue of services	online catalogue of services
3a	SERVICE REQUEST	REQUEST		request for the provision of a specific service	digital questionnaire	▪ Service provision request
3 b		AFFIDAVIT (AFDVT)		submission of affidavits	digital questionnaires	▪ AFDVT of company size reality ▪ AFDVT of single company status ▪ AFDVT of clean criminal records
4	SERVICE REFINEMENT			defining the content, terms, deadlines and form of service delivery	digital memo	digital memo
5a	SERVICE CONTRACT	CONTRACT CUSTOMIZATION		preparation of a tailor-made contract for a specific case of service provision	digital document	Draft contract for the provision of services
5 b		SERVICE PROVISION CONTRACT SIGNATURE		commenting and signing the service provision contract between the entity and EDIH	physical document	Service provision contract
5c		CONTRACT PUBLICATION IN CENTRAL REGISTER OF CONTRACTS	▪ company size ▪ a single company ▪ de minimis limit ▪ verification record ▪ IS SEMP ▪ decision (if relevant)	publication of the contract in the central register of contracts	scan of physical document	Scan of physical document, link to record in central register of contracts
6	SERVICE IMPLEMENTATION			provision of the service in the time, scope and manner according to the contract	physical provision, delivery of product, service, training, consultancy etc.	Records, acceptance certificates, photos, other relevant documents
7a	TERMINATION OF SERVICE PROVISION	CONFIRMATION OF SERVICE DELIVERY		confirmation of the delivery of the service by the supplier entity	digital document	Confirmation of service delivery
7b		CONFIRMATION OF ACCEPTANCE OF THE SERVICE		confirmation of service acceptance by the subject	digital document	Confirmation of acceptance of the service
7c		FEEDBACK		feedback of the subject served	digital questionnaire	Feedback evaluation
7d		CERTIFICATE OF PROVISION OF SERVICE		issuance of a service acceptance certificate	digital document	Certificate of acceptance of digitization service
8a	CONCLUSION	DMA T1		evaluation of the subject's digital maturity after 1 year	digital questionnaire	Questionnaire output
8 b		PUBLICITY		inclusion of the subject in the project's publicity program (if agrees)	digital outputs	Consent to publicity
8c		DMA T2		evaluation of the subject's digital maturity after 2 years	digital questionnaire	Questionnaire output

5.3.3 Document templates

For the purposes of uniformity, visual identity and continuity, a number of legal documents will be accessible to relevant persons on a common shared repository in the form of template documents. These document templates will be made available in a template working format which, while applicable across the client base, will take into account the specifics of the business case for each client when finalising that particular document and the documents will be further customised specifically for the needs of that particular client. This is to ensure both uniformity of approach and the ability to prepare the necessary documentation for the implementation of the legal relationship in an adequate timeframe, taking into account the dynamics of the business environment and the digitalisation process.

The document templates mentioned above will be clearly stored in a common shared repository. At the same time, the business cases of the individual clients to whom the services will be provided will be systematically concentrated in folders, and these folders will be journalised. The initial document portfolio will consist primarily of:

- Consents to the processing of personal data, for each of the partners (TUKE, UPJS, KEITVA) - for the cases envisaged by the GDPR (according to Article 6(1)(a) GDPR), or Act No. 18/2018 Coll. Personal Data Protection Act, where the data subject has consented to the processing of personal data for one or more specific purposes
- Model contracts - in particular the indirect aid contract foreseen in the DM 16/22 Scheme as amended by Amendment No 1 - which will form part of any contractual type that will cover the contractual relationship, for the purposes of the service provision of the EDCAS consortium this may be, for example, an innominate service contract, a works contract, etc.)
- Decisions on applications for minimum aid on the basis of an invitation (approval and/or rejection of the application) - candidates (applicants) apply for minimum aid in the indirect form on the basis of an application for aid in the indirect form. The prerequisite for the provision of the services is that the conditions laid down in the DM 16-22 Scheme as amended by Amendment No 1, or in the relevant legislation or other legally binding documents, are fulfilled. The assessment of the fulfilment of the conditions is the responsibility of the person responsible for verifying the fulfilment of these criteria (on the basis of the documents submitted by the applicant, which constitute a mandatory prerequisite for a successful application for aid in the indirect form), after which a decision is delivered to the applicant rejecting the application (in the event of non-fulfilment of the conditions, e.g. overrunning the limit for de minimis aid) or approving it (if all the conditions are fulfilled). Once the application is approved, the client is in the position of an aid beneficiary.

- Call (published on the EDCASS website - one version of the call for SMEs and VPOs carrying out an economic activity or planning to use the services for economic purposes and one for VPOs that will not use the services for economic purposes. The call contains the information necessary to apply for and use EDCASS services.
-

5.3.4 Service provision administration process

While the customer journey describes the steps and activities leading to the request for and receipt of a digitisation service in terms of activities relevant to the service recipient entity, the process of administering the provision of the service focuses on the complex range of activities that are carried out, recorded and archived by EDCASS as its provider.

CATRAS system for recording and tracking cases of service provision

Coordination between members of all work packages is important for the functionality of EDCASS and its effectiveness in service delivery. However, from the point of view of the administration of service delivery, the practical cooperation of the second and third work packages appears to be particularly crucial, with the following importance:

- **WP2** - establishment of a comprehensive system of procedures, practices and rules leading to a clear administration of service provision
- **WP3** - practical use of the system, from communicating with applicants for digitisation services to creating, recording and tracking individual cases of provision

For this purpose, WP2 and WP3 staff use their own online system **CATRAS** (Case Tracking System). This is a system of linked electronic files (Google Sheets documents), composed of the following five documents:

File 00 Dashboard

The importance of this file lies in the quick and clear access to basic project information, which tells in figures and graphs the current status of service contracting and disbursement of funds. All of this information and the current status is displayed against set indicators (project KPIs). An overview of all these figures and facts is therefore interesting not only from a practical but also from a management and reporting perspective.

The 00 Dashboard file provides the following information (for the project overall and for each consortium partner):

- Service budget utilisation (more specifically, allocation of funds to open cases) for the project and by partner,
- The number of open service delivery cases relative to the timeline (calculated with the current date relative to the 06/2025 date, which is the approximate projected limit for opening cases so that service delivery is completed before the 10/2025 date),
- The number of cases contracted to the number of planned contracts for the current date,
- Number of open cases by service group (A, B, C, D),
- Number of open cases by type of applicant entity (SME, PSO),
- Number of entities that have increased their level of digital maturity after service provision,
- Number of corridors and links established at national and international level,
- Functional link to a file with a summary of open cases (File 01 - Summary).

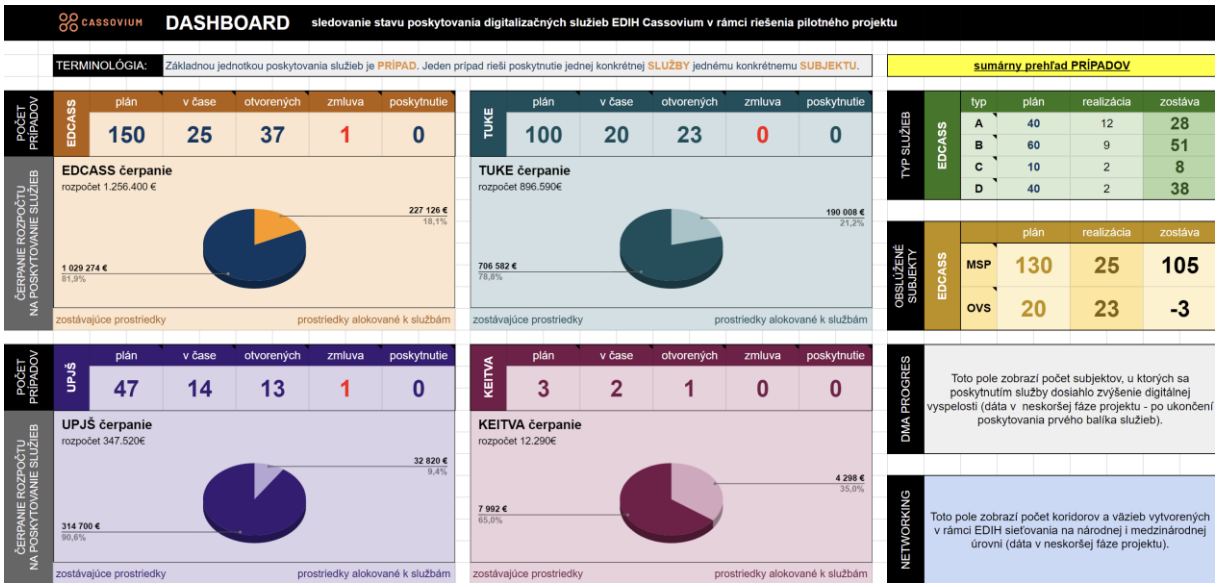


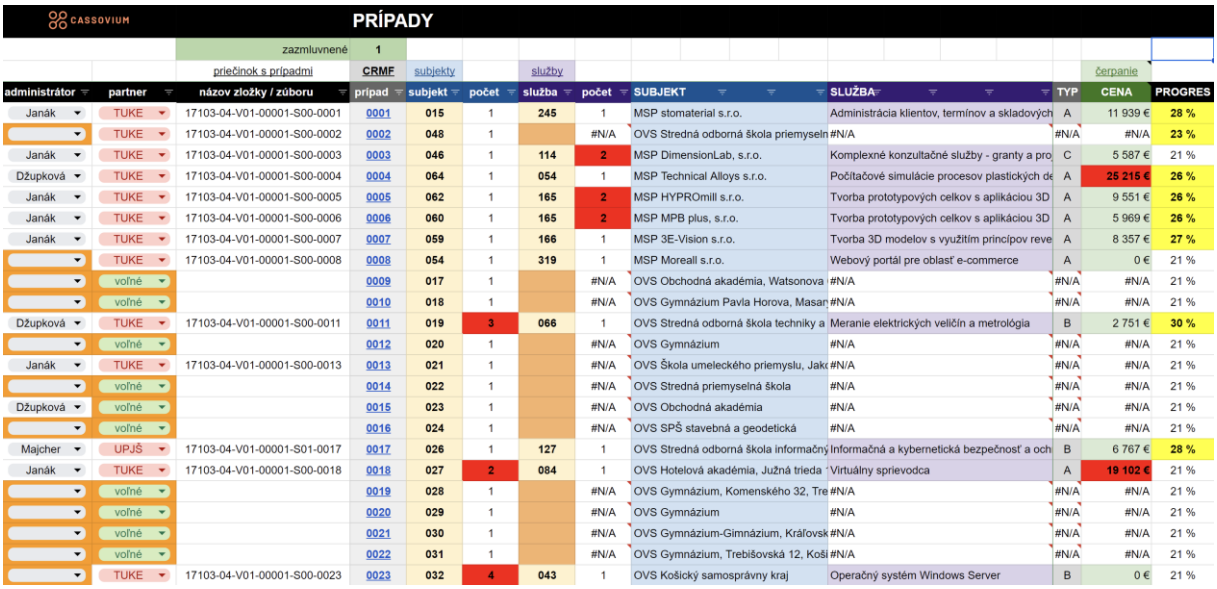
Image 13 - View of the 00 Dashboard file

File 01 Summary

From an administrative point of view, we have terminologically established the CASE as the basic unit of EDCASS service provision. A case describes the provision of one specific SERVICE to one specific SUBJECT.

Once registered, the entity is asked to prepare a Digital Maturity Assessment

(electronic DMA TO questionnaire). In the light of the results of this assessment and in accordance with its own needs and requirements, it then selects a specific service from the EDCASS portfolio with its application. At this stage, the WP3 staff member from the partner relevant from the service delivery perspective (according to the jurisdiction of the providing site) opens a new case (by assigning a case number), while at the same time assigning a specific service to the requesting entity as a potential recipient of the service.



PRÍPADY

		zazmluvnené	1										
		priečinok s prípadmi	CRMF	subjekty		služby						čerpanie	
administrátor	partner	názov zložky / zúboru	prípad	subjekt	počet	služba	počet	SUBJEKT	SLUŽBA	TYP	CENA	PROGRES	
Janák	TUKE	17103-04-V01-00001-S00-0001	0001	015	1	245	1	MSP stomaterial s.r.o.	Administrácia klientov, termínov a skladových	A	11 939 €	28 %	
	TUKE	17103-04-V01-00001-S00-0002	0002	048	1		#N/A	OVS Stredná odborná škola priemyseln	#N/A	#N/A	#N/A	23 %	
Janák	TUKE	17103-04-V01-00001-S00-0003	0003	046	1	114	2	MSP DimensionLab, s.r.o.	Komplexné konzultačné služby - granty a pro	C	5 587 €	21 %	
Džupková	TUKE	17103-04-V01-00001-S00-0004	0004	064	1	054	1	MSP Technical Alloys s.r.o.	Počítačové simulácie procesov plastických de	A	25 215 €	26 %	
Janák	TUKE	17103-04-V01-00001-S00-0005	0005	062	1	165	2	MSP HYPROmill s.r.o.	Tvorba prototypových celkov s aplikáciou 3D	A	9 551 €	26 %	
Janák	TUKE	17103-04-V01-00001-S00-0006	0006	060	1	165	2	MSP MPB plus, s.r.o.	Tvorba prototypových celkov s aplikáciou 3D	A	5 969 €	26 %	
Janák	TUKE	17103-04-V01-00001-S00-0007	0007	059	1	166	1	MSP 3E-Vision s.r.o.	Tvorba 3D modelov s využitím princípov reve	A	8 357 €	27 %	
	TUKE	17103-04-V01-00001-S00-0008	0008	054	1	319	1	MSP Moreall s.r.o.	Webový portál pre oblasť e-commerce	A	0 €	21 %	
	voľné		0009	017	1		#N/A	OVS Obchodná akadémia, Watsonova	#N/A	#N/A	#N/A	21 %	
	voľné		0010	018	1		#N/A	OVS Gymnázium Pavla Horova, Masar	#N/A	#N/A	#N/A	21 %	
Džupková	TUKE	17103-04-V01-00001-S00-0011	0011	019	3	066	1	OVS Stredná odborná škola techniky a	Meranie elektrických veličín a metrológia	B	2 751 €	30 %	
	voľné		0012	020	1		#N/A	OVS Gymnázium	#N/A	#N/A	#N/A	21 %	
Janák	TUKE	17103-04-V01-00001-S00-0013	0013	021	1		#N/A	OVS Škola umeleckého priemyslu, Jak	#N/A	#N/A	#N/A	21 %	
	voľné		0014	022	1		#N/A	OVS Stredná priemyselná škola	#N/A	#N/A	#N/A	21 %	
Džupková	voľné		0015	023	1		#N/A	OVS Obchodná akadémia	#N/A	#N/A	#N/A	21 %	
	voľné		0016	024	1		#N/A	OVS SPŠ stavebná a geodetická	#N/A	#N/A	#N/A	21 %	
Majcher	UPJŠ	17103-04-V01-00001-S01-0017	0017	026	1	127	1	OVS Stredná odborná škola informačný	Informačná a kybernetická bezpečnosť a och	B	6 767 €	28 %	
Janák	TUKE	17103-04-V01-00001-S00-0018	0018	027	2	084	1	OVS Hotelová akadémia, Južná trieda	Virtuálny sprievodca	A	19 102 €	21 %	
	voľné		0019	028	1		#N/A	OVS Gymnázium, Komenského 32, Tre	#N/A	#N/A	#N/A	21 %	
	voľné		0020	029	1		#N/A	OVS Gymnázium	#N/A	#N/A	#N/A	21 %	
	voľné		0021	030	1		#N/A	OVS Gymnázium-Gimnázium, Kráľovsk	#N/A	#N/A	#N/A	21 %	
	voľné		0022	031	1		#N/A	OVS Gymnázium, Trebišovská 12, Koši	#N/A	#N/A	#N/A	21 %	
	TUKE	17103-04-V01-00001-S00-0023	0023	032	4	043	1	OVS Košický samosprávny kraj	Operačný systém Windows Server	B	0 €	21 %	

Image 14 - View of File 01 Summary

Each line of the 01 Summary file represents one specific case of provisioning. This summary of all open cases contains the following information:

- Case Administrator - last name of the WP3 staff member responsible for case administration,
- Providing Partner - the name of the consortium partner that is providing the case,
- Name of the case documentation folder - in a format compliant with MIRRI requirements (labelling of cases and their documentation folders at SK EDIH level) with a functional link to this folder,
- Case number - each case with a new unique number (e.g., providing two different services to one entity constitutes two different cases) with a functional link to the case administration worksheet,
- Number of cases contracted
- Entity Number - Entity ID assigned when registering in the EDCASS portal,
- Number of open cases for a specific entity - serves as an ongoing informative check on multiple service provision to a single entity,
- Service Number - Service ID assigned to the service when it is created by the

providing site in the admin interface of the EDCASS service catalogue,

- Number of open cases with a specific service - serves as an ongoing informative check of the multiple provision of a specific service (to check the capacity and budget utilization of the providing department),
- Name and type of entity - the name of the SME or PSO as stated at registration,
- Name of service,
- Type of service - by service group (A, B, C, D),
- Service price - the published catalogue value of the service at the requested price level,
- Administration progress - percentage of the progress of administration and service provision (status of confirmation of the individual steps of the administration process by uploading the relevant documentation).

File 02 Cases

The 02 Cases file contains tabbed sheets of individual cases (by case number) at the bottom of the file. Each sheet integrates:

a) Information about the case, the subject and the service:
   - The case number and surname of the case administrator,
   - The name of the entity, with contact details of the entity,
   - The name of the service, with contact details of the provider,
   - Choice of price level according to the service request,
   - The list price value of the service and the calculation of the de minimis aid value.

b) Information on the progress of the administration with functional links to the case documentation files:
   - The step number in the process of administering the provision of the service,
   - The status of completion of the step with a functional link to the confirmation documentation file,
   - Overall progress (%) of administration and service delivery.

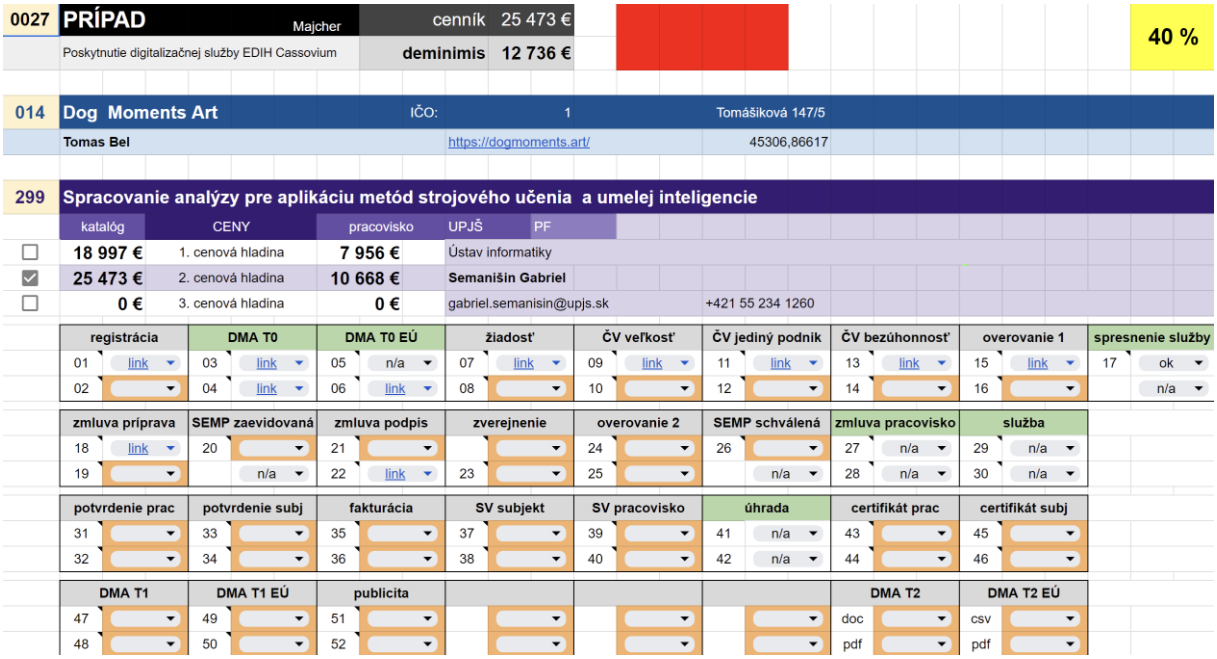


Image 15 - View of File 02 Cases

File 03 Drawdown

By the term disbursement in the administration of service provision we do not mean the actual implementation of payments and thus transfers of funds from the project budget, but the allocation of the relevant amounts to open cases in order to commit them for the purpose of rewarding the service provider.

File 03 Disbursement records the allocation of funds in parallel by consortium partner affiliation, by specific entities and by specific services.

This allocation, which serves as information on the reservation of funds, is important in terms of maintaining a state of ongoing operability in the allocation of cases and fulfils four basic functions:

a) prevention of opening too many cases for one entity,
b) Preventing the opening of too many cases for one service, or the service provider,
c) tracking the status of expected budget execution over time,
d) monitoring the balance of the relevant part of the project budget allocated to the financial coverage of service delivery.

File 09 Export

The 09 Export file is live linked to the comprehensive database of the EDCASS portal, where all information on entities and services is accumulated. It serves as a data source for the four previous CATRAS files and is the only one of these files that is not editable (read-only data). It is therefore irrelevant from the point of view of WP3 activities in the administration of service provision, providing a source and control function.

Describing the process of administering the provision of the service

The process of administering the service provision is best seen in any case sheet of the 02 Cases file. Approximately 30 steps (as the need to administer certain sub-activities evolves) are described and recorded:

- communication and creation of relevant documentation with the service provider,
- communication and production of relevant documentation with the service recipient entity,
- confirmation of the creation and archiving of the relevant documentation
- functional links to documentation

For each step, the WP3 (case administrator) indicates the status of its completion by selecting from the following statuses:

a) ok - documentation has been created
b) link - documentation has been created and archived with a functional link attached
c) n/a - the step is irrelevant or unjustified for the specific case

The importance of the individual steps within the service delivery administration process as a whole is set out in the table below. The steps are described through the documentation that is produced as they are carried out. Steps 27 and 28 are omitted from the table, leaving room for the archiving of the contract between the consortium partner and the service provider. However, the creation of such a contract is not yet foreseen, as the nature and functionality of the EDCASS relationship with the site is generally an internal matter for TUKE, UPJS and KEITVA respectively.

Table 23 - Service provision administration process

#	Name of step	Step description for SME	Description of the PSO step	Format
01	registration	Registration form	Registration form	doc
02		n/a	n/a	pdf
03	DMA T0	Editable DMA questionnaire record	Editable DMA questionnaire record	doc

#	Name of step	Step description for SME	Description of the PSO step	Format
04		n/a	n/a	pdf
05	DMA TO EU	Automatically generated DMA from the portal	Automatically generated DMA from the portal	csv
06		DMA questionnaire output from the DMA portal	DMA questionnaire output from the DMA portal	pdf
07	request	Editable service request	Editable service request	doc
08		Signed service request	Signed service request	pdf
09	CT size	Editable MS on the size of the enterprise	n/a	doc
10		Signed QV on the size of the company	n/a	pdf
11	ČV single enterprise	Editable MS on a single undertaking	n/a	doc
12		Signed LOI on a single enterprise	n/a	pdf
13	ČV Integrity	Editable Integrity CV	Editable Integrity CV	doc
14		Signed Certificate of Integrity	Signed Certificate of Integrity	pdf
15	verification 1	Internal record of the first verification	Internal record of the first verification	doc
16		Service decision (relevant version)	Service decision (relevant version)	pdf
17	service refinement	A record of the communication about the service parameters EDCASS -subject -workplace (n/a for group)	A record of the communication about the service parameters EDCASS -subject -workplace (n/a for group)	doc
18		n/a	n/a	
19	Contract preparation	Editable draft contract (n/a for group)	Editable draft contract (n/a for group)	doc
20		Versions of the Treaty after comments	Versions of the Treaty after comments (n/a for group)	doc
21	SEMP registered	Screnshot of the records in the IS SEMP system (registered status)	n/a	Fig
22		n/a	n/a	
23	contract signature	Final version of the contract ready for signing	Final version of the contract ready for signing (n/a for group)	doc
24		Signed contract	Attendance list	pdf
25	Publication	Record of publication of the contract in the CRZ	n/a	pdf
26		n/a	n/a	
27	verification 2	Editable record of the second verification	n/a	doc
28		Final record of the second verification	Final record of the second verification (PSO register)	pdf
29	SEMP Approved by	Screnshot of the records in the IS SEMP system (status approved)	n/a	Fig

#	Name of step	Step description for SME	Description of the PSO step	Format
30		n/a	n/a	
31	Contract workplace	n/a	n/a	
32		n/a	n/a	
33	Service	Record of the course of service provision	Record of the course of service provision	folder
34		Documentation of service provision and outputs	Documentation of service provision and outputs	folder
35	confirmation of work	Certificate of Provision completed by the workplace (n/a for group)	Certificate of Provision completed by the workplace (n/a for group)	doc
36		n/a	n/a	pdf
37	confirmation of subj	Acknowledgement of receipt completed by the subject (n/a for group)	Acknowledgement of receipt completed by the subject (n/a for group)	doc
38		n/a	n/a	pdf
39	Billing	n/a	n/a	xls
40		n/a	n/a	pdf
41	SV entity	Record of the electronic questionnaire in the table	Record of the electronic questionnaire in the table	xls
42		Output from the electronic questionnaire per subject	Output from the electronic questionnaire per subject	pdf
43	SV workplace	Record of the electronic questionnaire in the table	Record of the electronic questionnaire in the table	xls
44		Output from the electronic workstation per workstation	Output from the electronic workstation per workstation	pdf
45	reimbursement	n/a	n/a	pdf
46		n/a	n/a	pdf
47	work certificate	n/a	n/a	doc
48		Certificate of Provision for the workplace	Certificate of Provision for the workplace	pdf
49	certificate of subj	n/a	n/a	doc
50		Certificate of Acceptance for the entity	Certificate of Acceptance for the entity	pdf
51	DMA T1	Editable DMA questionnaire record	Editable DMA questionnaire record	doc
52		Final record of the DMA questionnaire	Final record of the DMA questionnaire	pdf
53	DMA T1 EU	Automatically generated DMA from the portal	Automatically generated DMA from the portal	csv
54		DMA questionnaire output from the DMA portal	DMA questionnaire output from the DMA portal	pdf
55	publicity	Background to publicity	Background to publicity	folder
56		Documenting publicity and overlaps	Documenting publicity and overlaps	folder
57	DMA T2	Editable DMA questionnaire record	Editable DMA questionnaire record	doc
58		Final record of the DMA questionnaire	Final record of the DMA questionnaire	pdf
59	DMA T2 EU	Automatically generated DMA from the portal	Automatically generated DMA from the portal	csv

#	Name of step	Step description for SME	Description of the PSO step	Format
60		DMA questionnaire output from the DMA portal	DMA questionnaire output from the DMA portal	pdf

CATRAS functionality

The following figure describes the functionality and the different relationships between the entities of the CATRAS case tracking system. It thus clarifies the importance of the different steps, documents and links in the service delivery administration process.

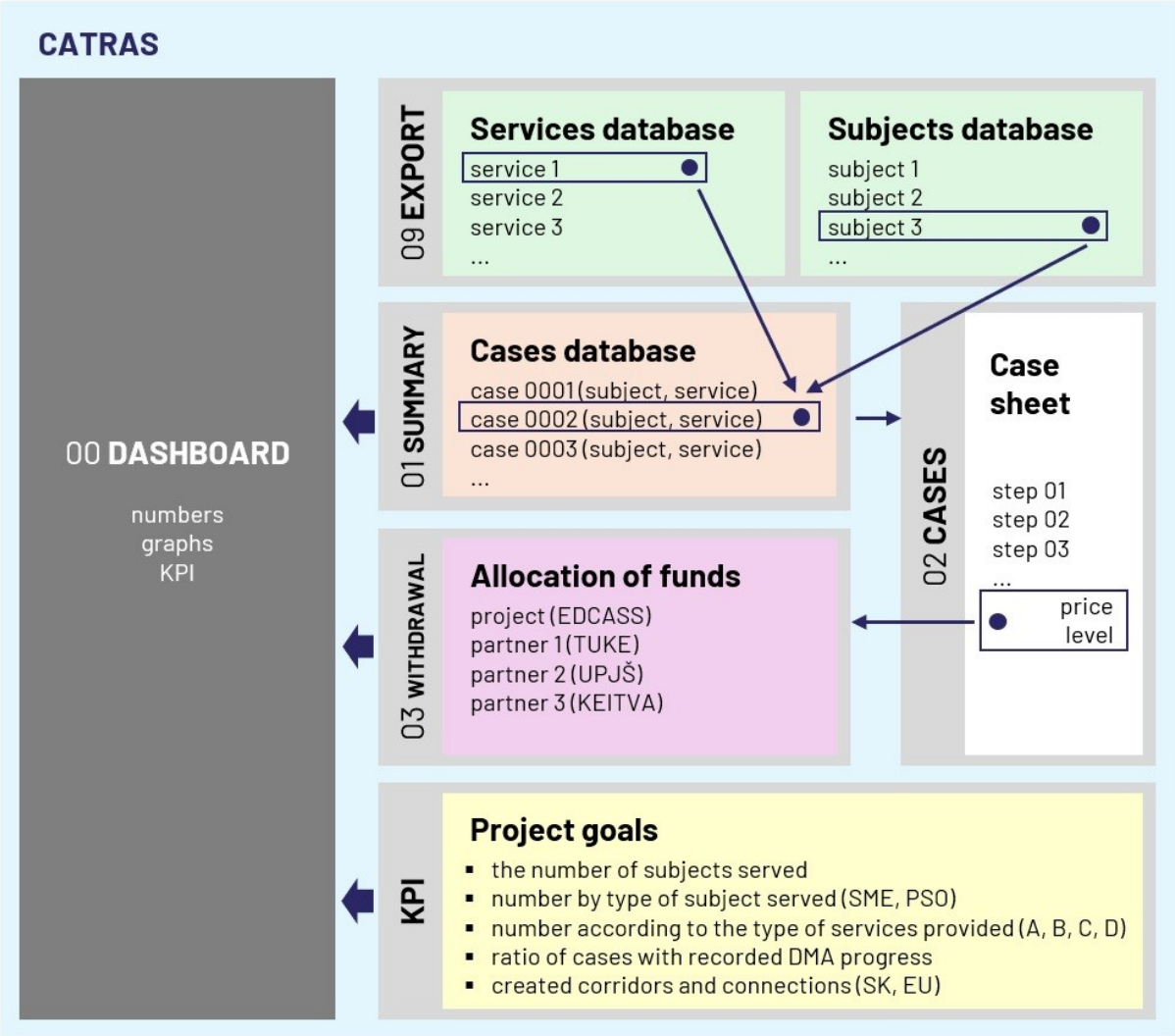


Image 16 - CATRAS system for managing the administration process of service provision

5.3.5 Service lifecycle

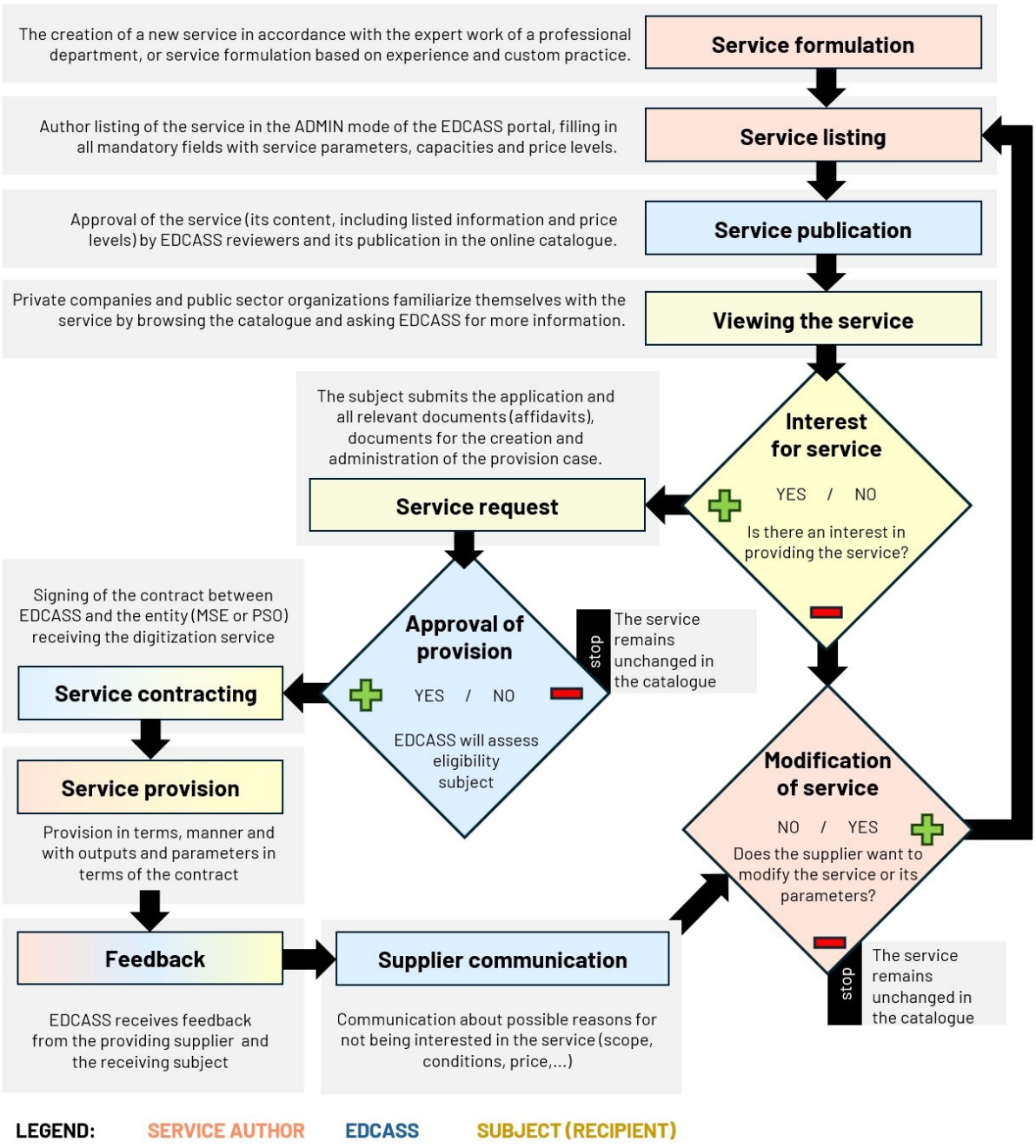


Image 17 - Service lifecycle

5.4 WP4: Corridors and networking

5.4.1 Actively seeking partnerships and building ecosystems

The active partnership search and ecosystem building within the EDIH CASSOVIUM project is taking place in a systematic and well-planned process. The first step is the identification of potential partners, which includes organisations, businesses, research institutions, local governments and other relevant actors that could contribute to the digital transformation in the region and have the interest and capacity to collaborate on digitisation and innovation projects. This is followed by an analysis of potential partners, where their skills, resources, experience and interests are assessed (suitability for project collaboration is assessed). The identified partners are then contacted and proposed to collaborate on specific initiatives. Meetings and workshop events are held to address specific topics related to digital transformation and innovation in the region. Once potential partners have been identified and assessed, formal partnerships and agreements are established to define commitments and obligations between participants. Support and coordination for active partnerships is provided to ensure that projects and initiatives within the EDIH CASSOVIUM are properly implemented and achieve their stated objectives. Finally, the progress and results of the collaboration are regularly monitored, and necessary adjustments and improvements are made over time. These steps help to ensure effective partnership search and ecosystem building within the EDIH CASSOVIUM project and strengthen the digital transformation in the ESK-REG.

5.4.2 Contribution of EDIH CASSOVIUM to building a regional innovation ecosystem

The contribution of the EDIH CASSOVIUM project to building a regional innovation ecosystem can be significant for several reasons. Bringing together different actors such as businesses, research institutions, universities, local governments and other organisations enables joint efforts to promote digital transformation and innovation in the region, contributing to the creation of a strong ecosystem where knowledge, experience and resources are shared. In addition, the project provides financial, technical and advisory resources to support innovation projects and initiatives in the region, facilitating the development of new ideas, technologies and solutions, contributing to economic competitiveness and growth. Organising training and development programmes on digital transformation and innovation for local businesses, professionals and young people increases digital skills, fosters entrepreneurial spirit and prepares the workforce for the future. Creating an environment that fosters collaboration between businesses and research institutions and facilitates technology and know-how transfer between sectors and actors encourages the emergence of new products, services and business models. In addition, the project provides support and incentives for start-ups and small and medium-sized

enterprises (SMEs), thereby strengthening the business environment in the region and fostering job creation and growth. The joint efforts and commitment of all relevant actors enables the EDIH CASSOVIUM project to create a dynamic and sustainable regional innovation ecosystem that contributes to the development and competitiveness of the Košice region and Slovakia as a whole.

Positioning EDCASS in the innovation ecosystem of Eastern Slovakia

The innovation ecosystem of Eastern Slovakia can be defined as a complex set of institutions, enterprises, educational institutions, civil society organisations and public sector organisations that work together to create an environment that supports innovation and the creation of new technologies. The innovation ecosystem seeks to support the growth and competitiveness of the region through research and development, entrepreneurship and education.

Eastern Slovakia is rich in industries such as engineering, energy, mining and ore processing. The region's innovation ecosystem needs to support these industries while encouraging diversification into new areas such as information technology, biotechnology or green technologies.

EDIH CASSOVIUM's performance in the innovation ecosystem must be understood comprehensively as fulfilling the goal of sustainability at all levels of ESG (environmental, social, governance). EDIH CASSOVIUM must contribute to sustainability in the financial, environmental, data protection (GDPR, cybersecurity), as well as technology (artificial intelligence, high-performance computing infrastructure, and the use of other digital technologies) areas.

The innovation ecosystem consists of:

- **Educational and R&D institutions** - Involving universities, research centres and vocational training institutions to support research and development. These institutions should work with business and industry to identify needs and opportunities for innovation.
- **Business and industry sector** - integration with existing business and industry sectors in the region, as well as promoting innovation in traditional sectors.
- **Innovation community** - supporting the development of the entrepreneurial community, including start-ups, small and medium-sized enterprises. Incubators and accelerators can be important players in providing support for start-ups.
- **Financing innovation** - the availability of funding for innovation projects through public and private sources.
- **Regional cooperation** - cooperation between different actors in the region to

create synergies and share resources.

- **technology transfer** - support for technology transfer between research institutions and the business sector in order to commercialise the outputs of scientific research activities.
- **Support for innovative industries** - support for sectors with a particular focus on innovative and high-growth industries such as information technology, biotechnology and green technologies.

EDIH CASSOVIUM can be a key player in the innovation ecosystem of Eastern Slovakia by providing a platform and support for digital transformation in the region through:

- **support for research and development** - EDIH CASSOVIUM can cooperate with research and educational institutions in the region to support innovative projects and the development of new technologies. This may include providing funding for research projects and establishing university-industry collaborations.
- **Start-up incubation and acceleration** - providing support and resources for new and innovative businesses in the region. EDIH CASSOVIUM can play a role in the incubation and acceleration of start-ups, supporting the growth of the entrepreneurial community.
- **Digital transformation of industry** - to assist existing industries in the region in their digital transformation. Providing know-how and technological solutions that support more efficient and sustainable production.
- **Working with regional partners** - working intensively with regional organisations, businesses and the public sector to identify needs and opportunities for innovation. This includes working with local authorities, civil society organisations and industry associations.
- **Education and Training** - providing education and training to promote digital skills and knowledge in the region. This may include courses, workshops and training on new technologies and innovation.
- **Support for SMEs** - providing specialised help for SMEs facing the challenges of digital transformation. This can include advice, access to digital tools and funding for innovation projects.
- **Green transformation** - providing know-how and support for the green transformation of industry and other sectors in the region, with an emphasis on sustainable technologies and practices.
- **internationalisation and cooperation** - creating the conditions for international cooperation and exchange of know-how between innovation ecosystems at European level. This can increase the competitiveness of the region and its involvement in global innovation flows.

In this way, EDIH CASSOVIUM can act as a catalyst for the innovation ecosystem of Eastern Slovakia, fostering collaboration, growth and sustainability in the region.

The innovation ecosystem of Eastern Slovakia includes in particular:

TUKE

- Faculty of Electrical Engineering and Informatics with expertise in digital technologies,
- Faculty of Manufacturing Technologies with expertise in digital transformation of manufacturing,
- Faculty of Mining, Ecology, Process Control and Geotechnology, which has expert capacity in the field of ecology,
- Faculty of Materials, Metallurgy and Recycling, which deals with issues related to ecology and recycling,
- University Science Park TECHNICOM (in cooperation with UPJS) as an internationally recognised centre for research and technology transfer in the field of innovative applications with the support of knowledge-based technologies.

UPJS

- Faculty of Science, which carries out education and research in the fields of ecology, green energy, geoinformatics, and advanced materials,
- Faculty of Public Administration and Faculty of Law, which have an impact on law and public policy making at local, regional and national levels,
- Technology and Innovation Park, which is a centre of scientific and technological excellence in the fields of biomedicine, biotechnology, information technology and advanced materials,
- Medipark University Science Park, as a top national centre for research and development and transfer of knowledge into practice in the field of medicine.

Innovation Centre of the Košice Region (ICKK)

- its main responsibility is to implement the regional innovation strategy and stimulate further development of the innovation ecosystem. It focuses on talent development in secondary schools, provides special acceleration programmes for start-ups and helps SMEs improve their international business potential. It works closely with international investors. The founders are the Košice Self-Governing Region, the City of Košice, UPJS, TUKE and the University of Veterinary Medicine and Pharmacy in Košice.

Eastern Slovak Space Cluster

- the aim of the cluster is to efficiently connect interested entities carrying out R&D, commercial or promotional activities in the field of space technologies and to create a supportive ecosystem for the emergence of new innovative start-ups, bringing new products and services using space technologies. The Memorandum on the creation of the cluster was signed by TUKE, UPJS, the Slovak Agency for Investment and Trade Development (SARIO), the Institute of Experimental Physics of the Slovak Academy of Sciences (IEF SAV) and Deutsche Telekom IT Solutions Slovakia.

National Hydrogen Association of Slovakia

- an association supporting the introduction of hydrogen technologies as a sustainable path to carbon neutrality. TUKE and UPJS are founding members;

These entities are also suitable sources for attracting or approaching potential clients for EDIH CASSOVIUM services. The goal of the innovation ecosystem of Eastern Slovakia must be to create a dynamic and sustainable environment that will stimulate the creation and implementation of innovations, thereby contributing to the economic and social prosperity of the region.

5.4.3 Creating partnerships within the EDIH network - communication

Building partnerships within the EDIH network is a key activity that fosters collaboration between different actors and contributes to achieving common goals in the field of digital transformation and innovation. Communication is an integral part of this process, not only between individual EDIHs, but also between EDIHs and their partners. There are two main models of partnerships within the EDIH network:

- **Bilateral partnerships (corridors):** this model aims at establishing close cooperation between two EDIHs located in different regions or countries. These bilateral partnerships, also called "corridors", allow for an efficient sharing of know-how, experience and resources between the different EDIHs. Communication within the bilateral partnerships is aimed at identifying common priority areas and projects and coordinating joint activities.
- **Multilateral partnerships (thematic groups of EDIHs):** Multilateral partnerships aim at cooperation between several EDIHs dealing with the same or similar themes or vertical sector. These partnerships, which can be organised in the form of thematic groups of EDIHs, allow for deeper linkages and synergies between different initiatives and projects. Communication in multilateral partnerships aims at creating synergies, sharing best practices and coordinating joint activities.

In the context of our EDIH CASSOVIUM, it is important to engage in both types of partnerships, whether in bilateral relations with other EDIHs within Europe and Slovakia or in multilateral partnerships focused on specific themes or sectors. Communication is a key tool to achieve successful cooperation in these partnerships and it is therefore important that we make efforts to build effective communication channels and relationships with other members of the EDIH network. In this way, we will be able to actively contribute to the development of the European digital innovation ecosystem and support the digital transformation in Slovakia.

5.4.4 Links with other European networks (EEN, Startup Europe, EIT)

Links with other European networks such as EEN (Enterprise Europe Network), Startup Europe and EIT (European Institute of Innovation and Technology) can significantly enrich and strengthen the effects of the EDIH CASSOVIUM project. The EDIH CASSOVIUM project can also benefit from the experience and know-how of these networks through the exchange of know-how, joint projects and initiatives. Linking the EDIH CASSOVIUM project with other European networks will create synergies and better coordination between the different initiatives aimed at promoting digital transformation and innovation in Europe. This networking will also allow for the provision of extended support to enterprises, start-ups and innovators and the sharing of resources and experiences between the different initiatives. Collaboration with other European networks can increase the impact and effectiveness of the EDIH CASSOVIUM project, strengthening its ability to support digital transformation and innovation in the Košice region and beyond.

5.5 WP5: promotion and dissemination

The WP5 agenda includes:

a) planning dissemination activities, including the development of a plan for dissemination activities. The plan identifies objectives, key messages, establishes target audiences, communication channels, social media plan. It will also detail the planned budget and relevant indicators (to monitor and evaluate the creation and improvement of EDIH CASSOVIUM's visual identity, communication, dissemination and exploitation of its achievements, and overall "evangelism" on the theme of digital transformation). A dissemination plan should be prepared in the initial phase of the project.

b) promotion of the EDIH CASSOVIUM brand, including the development of the EDCASS brand manual, logo, visual identity rules, design manual.

c) Improving the visibility of EDIH CASSOVIUM by promoting achievements, building awareness of digital transformation in the region, including creating, implementing and improving the visual identity of EDIH CASSOVIUM,

communicating achievements and raising awareness of digital transformation in the region. It includes the organisation of dissemination activities (one-sided activities, workshops, seminars, events, press conferences, etc.). Communication channels will include print, online and social media (e.g. web, PR articles, press releases, blogs, videos and newsletters), promotional campaigns, physical identity (e.g. roll-ups, promotional materials, billboards and leaflets). This role also includes the activities of EDIH Ambassadors (influencers). Achievements will be showcased through best practices and presentation of success stories to promote successful local and regional examples of digital transformation.

d) promotion of services and collection of customer feedback in order to promote EDIH CASSOVIUM integrated services to potential customers in the region and also to collect customer experience and feedback. The role includes 'pre-sales' activities in the form of promoting, contacting, informing and inviting potential customers to use EDIH CASSOVIUM services. The task includes 'post-sales' activities in the form of collecting customer opinions, evaluation of the quality of the services provided and outputs from the Digital Maturity Assessment, which need to be linked to the task under WP2(d) (evaluation of the pilot run). The evaluation of the feedback and evaluation can be made publicly available as appropriate.

5.5.1 Communication channels

Effective communication is a key building block for the success of any project. The importance of communication is even greater in the case of the EDIH CASSOVIUM project, given its ambition to transform the digital ecosystem in Eastern Slovakia. The communication resources used by the project are crucial not only for the smooth flow of information, but also for building trust, cooperation and ensuring synergy between all stakeholders.

Communication in the case of EDIH CASSOVIUM aims to reach several target groups including regional and local governments, cities and municipalities, media, businesses, academic institutions, NGOs and the general public.

EDIH CASSOVIUM will use various tools and channels to disseminate information about the project, its activities and its impact on society. EDIH CASSOVIUM will also serve as an "evangelization" forum to raise awareness among the business community, public institutions, policy makers and the public in general on the topics of digital transformation of the economy and society (challenges, trends, opportunities, threats, etc.).

EDIH CASSOVIUM's extensive network of communication tools highlights the need for a balanced and targeted application of communication channels. Recognising the individual characteristics of the project, the preferences of the parties involved and focusing on specific communication objectives are key to the successful implementation of these tools.

Within the communication channels of the EDIH CASSOVIUM project, emphasis must be placed on their optimisation and synergistic use in order to achieve an efficient and comprehensible exchange of information. With the growing importance of communication in the digital environment and the complexity of the project, it is important to constantly innovate and adapt communication strategies according to current needs and trends.

The main objective of the communication plan is to raise awareness of the project and its benefits for the target groups, in particular:

1. report on the project, the opportunities exploited, the successes and the results obtained to the business community, public institutions, policy makers and the public. By reaching out to identified stakeholders, spreading positive impact and promoting business development, EDIH CASSOVIUM can inspire and attract clients to use EDIH CASSOVIUM's integrated services across the region.
2. raise awareness of the benefits of EU-funded projects and show the success of European cooperation,
3. build a strong brand, visual identity and increase the visibility of EDIH CASSOVIUM and the entire EDIH network in the region, as well as individual project partners,
4. Promote the portfolio of services and their offerings to reach potential clients, soliciting feedback from clients on the quality of integrated service delivery,
5. Raise awareness of the benefits and urgency of the digital transformation of the economy and society and promote the digital inclusion of identified stakeholders.

Basic principles of EDIH CASSOVIUM communication

Contextual adaptability

- One of the basic principles of EDIH CASSOVIUM communication should be contextual adaptability. Each communication channel is used depending on the specific situation, the type of information and the target group. For example, while email can be effective for formal communication with partners, internal forums and blogs can serve as a space for open discussion and idea sharing within the team.

Interactive elements

- At a time when face-to-face contact is not always possible, video conferencing is becoming an important tool for interacting with partners and customers. Integrating interactive elements such as online polls, questionnaires or presentations helps to ensure active participation and valuable feedback.

Real-time information

- Chat applications are used for fast and flexible exchange of information between team members. Their advantage is that communication takes place in real time as well as that they create an informal space for quick communication and discussions. It is important to maintain a professional tone so that the seriousness of the communication is not lost.

Variety of formats

- The combination of different communication formats, from traditional emails to modern video conferencing, will allow the project to adapt to the preferences of the stakeholders. The variety of formats also encourages a diversity of content and contributes to engaging different types of audiences.

Regular revisions and optimization

- EDIH CASSOVIUM communication strategies must be regularly reviewed and optimised. In practice, this means evaluating the effectiveness of each channel, monitoring feedback and adapting communication plans to the needs of the project and its stakeholders.

Innovation and technology trends

- The use of new technological trends and innovations in the field of communication is essential to remain competitive and attract the attention of stakeholders or target groups. Keeping abreast of new developments in this area is a priority for EDIH CASSOVIUM.

EDIH CASSOVIUM communication channels are not only a tool to transmit information, but also a means to build relationships, gain support and raise the project's profile in the digital world. Their success lies in their synergy and adaptation to the dynamics of the project and the expectations of its partners. Based on these principles, a list of basic communication channels for EDIH CASSOVIUM has been proposed.

Basic communication channels

The visual identity of EDIH CASSOVIUM in the form of a logo should be incorporated in all communication channels used, or where technically possible, in accordance with the approved logo manual4 .

Communication channels used for EDIH CASSOVIUM include:

Web page

- The website should provide all up-to-date information about the project (information about the consortium, objectives, activities and service offerings, as well as a contact form and contact information), information about the conditions and rules of use of the services provided, and a description of the processes (in an understandable form) that need to be followed in order to successfully deliver each service.

Press and media

- Press releases aim to report on relevant events and activities and may include the views of experts within the consortium in order to draw media attention to relevant topics. Press releases should include photographs or audiovisual content. They will be sent to regional and national media.

E-mail

- Email, as a formal method of electronic communication, remains an important tool for the transmission of important information and documents. In the EDIH CASSOVIUM project it is used for structured and formal communication with partners and internal team.

Telephone communication

- Voice communication over the phone adds a personal touch to the exchange of information. It is ideal for quick discussions or addressing immediate issues, allowing for a dynamic dialogue.

Videoconferencing

- Virtual meetings, where a visual component is combined with voice, are an effective way of communicating for the rapid exchange of information. Ideal for presentations and discussions with clients and partners.

Chat apps

- For the internal communication of the EDIH CASSOVIUM team, it is advisable to use chat applications that ensure fast exchange of information and collaboration between team members. Chat applications can also be used for quick and short exchange of information with clients.

Project management applications

- In the EDIH CASSOVIUM project, integrated project management applications

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play a key role in ensuring the smooth flow of information, team coordination and the achievement of set objectives. These tools offer a modern and efficient way to communicate, collaborate and track project progress. Applications such as Slack, MS Teams, Asana, Jira, or Trello can be a good representation of this type of communication channel.

Social media

- Social media platforms are becoming an important means for project visibility. Regular updates, news of events and sharing of relevant information through social media contribute to building awareness of the project, its objectives and achievements. The use of platforms such as Facebook, Twitter and LinkedIn provides a space to disseminate information, build community and interact with a wider audience.

Internal forums, blogs and newsgroups

- Internal forums and blogs are used for in-depth discussion, exchange of views and provision of information, creating a space for stakeholder participation.

Workshops and road tour

- In-person presentations of the project vision through workshops and road tours add personal touch and allow for targeted interaction with stakeholders.

Newsletter

- A regularly sent document grouping important news, events and information about the organisation or project allows transparent and regular communication with the team and partners.

In the selection and application of communication channels, the EDIH CASSOVIUM project aims not only to be effective, but also to take into account the specifics of the project and the expectations of stakeholders, so that communication fulfils its purpose and has a positive effect on the development of the digital ecosystem in Eastern Slovakia.

5.5.2 Supporting the branding of EDIH CASSOVIUM and the EDIH network

Branding is a process that involves a series of steps and strategies to build and, in subsequent phases, reinforce brand awareness. It is part of the overall brand development process, which aims to create and maintain brand presence and perception in the marketplace. Brand awareness needs to be built within the target group and in the market as a whole. This process is essential for the success of the brand in the present and in the future.

The spread of branding is not only about creating visual elements, outputs, but about the overall brand building, identity, brand awareness, which creates a long-lasting and lasting impression with customers, leading to long-term sustainability of the brand on

the market.

The main target groups for EDIH CASSOVIUM activities are:

- small and medium-sized enterprises and
- public administration organisations.

Branding includes:

1. Brand awareness - helps to ensure that people become aware of the existence of the brand, so that they become aware of and remember the products and services provided. This step is a key element of building a client base.
2. Positive brand perception - created by the interplay of effective branding and a mix of value, ethics, product and service quality, in the form of branding dissemination. For each target group it is advisable to set the right form of communication that will bring the most effective result.
3. Creating brand identity and personality - it is in the interest of increasing competitiveness if there is any aspect that helps a brand to differentiate itself from the competition. Being different is the element that most quickly creates a customer relationship with the brand, contributing to long-term brand recall.
4. Customer loyalty - when a customer develops a positive relationship with a brand, they tend to remain loyal to it and repeatedly seek out and use the brand's products and services.
5. developing a competitive advantage - effective branding can help a brand create and maintain a competitive advantage that will attract new customers and help retain existing ones.
6. ability to attract investment and talent - a strong brand is attractive not only to customers, but also to talented people and investors. This can lead to better business opportunities and to further development and growth.

Part of the branding strategy is to identify the target group (to whom we are going to present the brand), why we are going to present it and the way we are going to present it. A very important part of this strategy is to set the right form of communication with a specific target group so that the communication has the greatest positive impact and reaches and attracts the greatest number of clients.

The key elements and suggestions to support the branding of EDIH CASSOVIUM are as follows:

1. **Creation of a single visual identity (JVI)**

   It includes the creation and implementation of the JVI which includes the logo, colour scheme, typographic elements and other design elements. Consistency helps build brand differentiation, recognition and memorability.

2. **Strategic message**
   Creating a clear and understandable message emphasizing values, mission, benefits. The communication strategy must be tailored to the target group (SME, public sector, start-up, academia).

3. **Website**
   A clear, clear website providing information about the objectives, services, values of EDIH CASSOVIUM. The website should be optimized for mobile devices and the information should be easily searchable.

4. **Content Marketing**
   This category can include case studies, articles, blogs and the type of content that promotes EDIH CASSOVIUM's professional authority and excellence. Content that highlights the success and results achieved through EDIH CASSOVIUM.

5. **Social networks**
   The fastest way to disseminate news, information to individual target groups. Communication, interaction and reactions in the form of posts, replies, questions increase group engagement through applications such as Facebook, Instagram, LinkedIn.

6. **Events and presentations**
   Organizing and participating in events where EDIH CASSOVIUM can present its services and achievements. Workshops, conferences and webinars can strengthen EDIH CASSOVIUM's position as an expert in the field of digitalisation. Through its in-house qualified staff, recognized experts in their respective fields, the presentation of services is the most credible way.

   This category of tools to support the branding of EDIH CASSOVIUM also includes the following activities listed in the document entitled "Dissemination and Communication Plan":

   - EDIH CASSOVIUM - diglTally yours"
   - International conference on digital transformation in the Eastern Slovakia region,
   - event "Eastern Slovakia powered by the digital age",
   - Innoopsie, InnoMeets.

7. **Partnerships and cooperation**
   A prepared strategy for building partnerships with relevant organisations, institutions and companies can strengthen awareness of EDIH CASSOVIUM and ensure better outreach to the different target groups.

8. **Education and community support**
   Leaflets, clear and concise educational materials on digital innovation and other services for businesses and organisations. Raising awareness of digital

opportunities, fostering community and sharing useful information, increases the awareness and credibility of EDIH CASSOVIUM.

9. **Feedback**
   Actively soliciting feedback from member institutions and stakeholders can serve to continuously improve services and set the right communication and marketing strategy.

10. **Local visibility**
    Participation in local events increases the visibility and awareness of EDIH CASSOVIUM.

ANNEX 1: LIST OF THE EDIH CASSOVIUM SERVICES

The following list is the list of EDIH CASSOVIUM services as of the date of publication of this deliverable. The list is subject to change. Current services can be found in the EDIH CASSOVIUM Services Catalogue: https://sluzby.edihcassovium.sk/

A - Testing of innovative technologies, digitization and automation, contract research
A - Testovanie inovatívnych technológií, digitalizácia a automatizácia, zmluvný výskum

ID	SK názov	EN name
2	Fyzikálne modelovanie procesov prúdenia pri kontinuálnom odlievaní ocele	Physical modelling of flow processes in continuous steel casting
3	Numerické simulácie procesov prúdenia pri kontinuálnom odlievaní ocele	Numerical simulations of flow processes in continuous steel casting
7	Monitorovanie a riadenie spotrieb energií pre prevádzku budov založené na internetových technológiách a technológiách smart meteringu	Monitoring and management of energy consumption for building operation based on internet technologies and smart metering technologies
9	Monitorovanie a inovatívne testovanie kvality základných materiálov, polotovarov a výrobkov v oblasti zvárania a nedeštruktívneho testovania	Monitoring and innovative quality testing of basic materials, semi-finished products and products in the field of welding and non-destructive testing
11	Udržateľná výroba implementáciou progresívnej technológie vodného prúdu a jeho modifikácií	Sustainable production by implementing progressive water current technology and its modifications
14	Charakterizácia štruktúry a molekulovej mobility materiálov v tuhej fáze pomocou jadrovej magnetickej rezonancie	Characterization of the structure and molecular mobility of materials in the solid phase using nuclear magnetic resonance
20	Využitie techniky ETL & Analýza dát pre turizmus	Use of ETL technology & data analysis for tourism
23	Analýza pozície firmy na trhu (Benchmarking)	Analysis of the company's position on the market (Benchmarking)
24	Vyhľadávanie a automatické odpovede z textu v slovenčine	Search and automatic answers from text in Slovak
25	Chatbot v slovenčine pre podporu firemných procesov	Chatbot in Slovak to support company processes
26	Geotechnické modelovanie stability svahov	Geotechnical modelling of slope stability
27	Programovanie riadiacich systémov na báze PLC	Programming control systems based on PLC
28	Návrh elektroniky a výkonových polovodičových meničov pre špeciálne aplikácie	Design of electronics and power semiconductor converters for special applications
29	Vývoj systému pre podporu liečenia Alzheimerovej a Parkinsonovej choroby a pre rozvoj a zlepšovanie pohybových schopností a zručností športovcov – Vývoj hardvérovej časti	Development of a system for supporting the treatment of Alzheimer's and Parkinson's disease and for the development and improvement of movement abilities and skills of athletes - Development of the hardware part

ID	SK názov	EN name
30	Vývoj systému pre podporu liečenia Alzheimerovej a Parkinsonovej choroby a pre rozvoj a zlepšovanie pohybových schopností a zručností športovcov – Vývoj softvérovej časti	Development of a system for supporting the treatment of Alzheimer's and Parkinson's disease and for the development and improvement of movement abilities and skills of athletes - Development of the software part
31	Vývoj digitálneho automatického zariadenia pre rozvoj a kontrolu úrovne pohybových schopností športovcov – Vývoj hardvérovej časti	Development of a digital automatic device for the development and control of the level of movement abilities of athletes - Development of the hardware part
34	Simulácia prúdenia a distribúcie tepla	Simulation of flow and heat distribution
35	Simulácia rozptylu emisií (tuhých znečisťujúcich látok) v ovzduší v zastavanom území	Simulation of dispersion of emissions (solid pollutants) in the air in a built-up area
38	Rekultivácia environmentálne zaťažených území	Reclamation of environmentally burdened areas
39	Automatický prepis a titulkovanie audiovizuálneho obsahu v slovenskom jazyku	Automatic transcription and subtitling of audiovisual content in the Slovak language
42	Podpora vývoja konštrukčných riešení v oblasti obnoviteľných zdrojov energie	Support for the development of design solutions in the field of renewable energy sources
44	Návrh inovačných zariadení a prototypov pre metalurgický priemysel	Design of innovative devices and prototypes for the metallurgical industry
46	Numerické simulácie spaľovania plynných palív	Numerical simulations of the combustion of gaseous fuels
48	Povrchová analýza materiálu pomocou metódy XPS	Surface analysis of the material using the XPS method
49	Návrh modernej marketingovej stratégie na mieru s aktívnou podporou inovačných technológií	The design of a modern, tailor-made marketing strategy with the active support of innovative technologies
52	Výroba a testovanie prototypov	Production and testing of prototypes
54	Počítačové simulácie procesov plastických deformácií	Computer simulations of plastic deformation processes
60	Data mining za účelom prípravy veľkých dátových súborov určených pre aplikáciu techník umelej inteligencie zameranej na vyhľadávanie uhľovodíkových ložísk a podzemných úložísk tekutých médií	Data mining for the purpose of preparing large data files intended for the application of artificial intelligence techniques aimed at the search for hydrocarbon deposits and underground storages of liquid media
61	Návrhové procesy a implementácia UWB systémov v oblasti senzorových sietí	Design processes and implementation of UWB systems in the field of sensor networks
62	Štúdia posúdenia efektívnosti investície ťažobného projektu	Mining project investment efficiency assessment study
64	Hodnotenie úrovne zrelosti Priemyslu 4.0 v organizácii	Evaluation of the maturity level of Industry 4.0 in the organization
70	Matematické modelovanie hluku v pracovnom a životnom prostredí	Mathematical modelling of noise in the working and living environment
71	Digitalizácia komunikačných procesov a aplikácia inovácií v oblasti komunikačných, kolaboračných a streamingových technológií	Digitization of communication processes and application of innovations in the field of communication, collaboration and streaming technologies

ID	SK názov	EN name
78	Výskum štruktúry a chemického zloženia materiálov pomocou SEM/EDS	Research of the structure and chemical composition of materials using SEM/EDS
80	Digitalizácia výrobných procesov v podmienkach malých a stredných podnikov	Digitization of production processes in the conditions of small and medium-sized enterprises
84	Virtuálny sprievodca	Virtual guide
85	Zmluvný výskum a vývoj strojných zariadení s vyššou inteligenciou	Contract research and development of machinery with higher intelligence
86	Návrh a realizácia interaktívnych multimediálnych expozícií a rozhraní	Design and implementation of interactive multimedia exhibitions and interfaces
88	Návrh a tvorba štandardných a pokročilých 2D/3D digitálnych grafických riešení	Design and creation of standard and advanced 2D/3D digital graphic solutions
89	Audiovizuálna a fotografická produkcia, komplexná audiovizuálna postprodukcia	Audiovisual and photographic production, complex audiovisual post-production
91	Fotogrametria, postprodukcia a aplikácia 3D vizuálnych dát	Photogrammetry, post-production and application of 3D visual data
99	Budovanie informačných modelov pre zvolený korpus článkov	Building information models for the selected corpus of articles
100	Aplikácia digitálnych nástrojov do strojárenskej výroby	Application of digital tools in engineering production
102	Analýza zákazníckych dát	Analysis of customer data
103	Vývoj a testovanie inovatívnych technológií, digitalizácia a automatizácia a implementácia umelej inteligencie a konceptov kybernetickej bezpečnosti	Development and testing of innovative technologies, digitization and automation, and implementation of artificial intelligence and cyber security concepts
107	Optimalizácia spotreby a úspora elektrickej energie firiem	Optimizing consumption and saving electricity of companies
108	Zvýšenie úrovne kybernetickej bezpečnosti firmy	Increasing the level of cyber security of the company
112	Aplikovaná digitalizácia administratívnych a účtovných procesov	Applied digitization of administrative and accounting processes
115	Virtualizácia služieb	Virtualization of services
117	Digitalizácia a dátovo podporované rozhodovanie a hodnotenie v organizáciách verejnej správy	Digitization and data-supported decision-making and evaluation in public administration organizations
122	Digitálna transformácia obchodných procesov, inovačný audit, analýza dát	Digital transformation of business processes, innovative audit, data analysis
123	Analýza a návrh dátových služieb a inovácií v oblasti rizikových signálov dodávateľov, riadenia výdavkov a signálov porušujúcich hospodársku súťaž	Analysis and design of data services and innovations in supplier risk signals, spend management and anti-competitive signals
126	Analytické, konzultačné a operatívne služby v oblasti informačnej a kybernetickej bezpečnosti a ochrany osobných údajov	Analytical, consulting and operational services in the field of information and cyber security and personal data protection
131	Konzultačné a analytické služby v oblasti analýzy a spracovania dát a aplikácií umelej inteligencie	Consulting and analytical services in the field of data analysis and processing and artificial intelligence applications
134	Analytické a konzultačné služby v oblasti elektronického obchodu	Analytical and consulting services in the field of electronic commerce

ID	SK názov	EN name
141	GEOheat - simulácie prehrievania mesta (mestský ostrov tepla) ako dôsledok klimatickej zmeny	GEOheat - simulations of city overheating (urban heat island) as a result of climate change
148	Testovanie a kalibrácia palubných magnetometrov satelitov triedy CubeSat	Testing and calibration of on-board magnetometers of CubeSat class satellites
151	GEOflood - simulácie povodní na vodných tokoch ako dôsledok pretrhnutia vodnej nádrže	GEOflood - simulations of floods on waterways as a result of the rupture of a water reservoir
156	GEOsense – mapovanie územia pomocou bezpilotných leteckých systémov	GEOsense – territory mapping using unmanned aerial systems
160	Štúdia realizovateľnosti digitálnej inovácie poskytovaných služieb verejnej správy	Feasibility study of digital innovation of public administration services
165	Tvorba prototypových celkov s aplikáciou 3D tlače	Creation of prototype units with the application of 3D printing
166	Tvorba 3D modelov s využitím princípov reverzného inžinierstva	Creation of 3D models using the principles of reverse engineering
167	Digitalizácia priestorov s ich následnou vizualizáciou v prostredí virtuálnej a rozšírenej reality	Digitization of spaces with their subsequent visualization in a virtual and augmented reality environment
168	Služby certifikovaného európskeho zváracieho inžiniera	Services of a certified European welding engineer
173	Analýza stavu informačnej bezpečnosti	Analysis of the state of information security
174	Výpočtová cloudová infraštruktúra	Computing cloud infrastructure
176	Služba Server Housing	Server Housing service
179	Dedikovaná výpočtová infraštruktúra	Dedicated computing infrastructure
183	Služby v oblasti ochrany osobných údajov	Services in the field of personal data protection
184	Služby v oblasti priemyselnej bezpečnosti	Services in the field of industrial security
192	Konzultačné služby v oblasti duševného vlastníctva v online priestore	Consulting services in the field of intellectual property in the online space
194	Analýza obsahu komunikácie so zákazníkom	Analysis of the content of communication with the customer
208	Analytické a konzultačné služby v oblasti práva v digitálnych technológiách	Analytical and consulting services in the field of law in digital technologies
210	Dátovo podporovaný prieskum trhu, dodávateľov, odberateľov a produktov a služieb pre účely vyhľadania vhodného obchodného partnera	Data-supported research of the market, suppliers, customers and products and services for the purpose of finding a suitable business partner
245	Administrácia skladových zásob s využitím inteligentného spracovávania obrazu	Inventory management using intelligent image processing
269	Vizuálne spracovanie obrazu a jeho digitalizácia	Visual image processing and its digitization
270	Spracovanie digitálneho obrazu metódami počítačového videnia	Digital image processing using computer vision methods
299	Spracovanie analýzy pre aplikáciu metód strojového učenia a umelej inteligencie	Analysis processing for the application of machine learning and artificial intelligence methods
302	Využitie mikropočítačov ARDUINO v moderných metódach riadenia	Use of ARDUINO microcomputers in modern control methods

ID	SK názov	EN name
304	Digitálna transformácia, konvergencia OT a IT, UI automatizácia, edge, cloud, IoT	Digital transformation, OT and IT convergence, UI automation, edge, cloud, IoT
315	Kreatívne demonštračné robotické aplikácie a propagačné stánky umelej inteligencie	Creative demonstration robot applications and artificial intelligence promotional booths
317	Relevantnosť dát, anotácia vstupných dát pre strojové učenia, dátová analytika, predikcia	Data relevance, input data annotation for machine learning, data analytics, prediction
318	Webový portál so systémom pre správu obsahu	A web portal with a content management system
319	Webový portál pre oblasť e-commerce	Web portal for e-commerce
323	Overenie presnosti merania elektromera	Verification of the accuracy of the electricity meter measurement
326	Analytická štúdia realizovateľnosti digitálnej inovácie poskytovaných služieb v leteckej doprave	Analytical study of the feasibility of digital innovation of services provided in air transport
334	Interaktívne dotykové riešenie pre koncovú komunikáciu s klientom	Interactive touch solution for end-to-end communication with the client
335	Tvorba virtuálneho prostredia a prispôsobenie jeho integrovanej interakcie pre potreby užívateľa	Creation of a virtual environment and adaptation of its integrated interaction for the needs of the user

B - Education and building of necessary skills
B - Vzdelávanie a budovanie potrebných zručností

ID	SK názov	EN name
1	Vedecký výskum v oblasti automatizácie, optimalizácie, matematického modelovania a riadenia procesov	Scientific research in the field of automation, optimization, mathematical modeling and process control
4	Frekvenčné meniče Siemens	Siemens frequency converters
5	Objektovo - orientované programovanie v Jave	Object-oriented programming in Java
6	Relačné databázy a jazyk SQL	Relational databases and the SQL language
8	Koncept Industry 4.0/5.0 pre stredný a vysoký manažment	Industry 4.0/5.0 concept for middle and senior management
10	Príprava certifikovaného personálu v oblasti NDT v súlade s platnými normami, príprava a vzdelávanie medzinárodných zváracích technológov a inžinierov	Preparation of certified personnel in the field of NDT in accordance with applicable standards, training and education of international welding technologists and engineers
21	Internet vecí	Internet of Things
22	Rozvoj podnikateľskej činnosti	Development of business activity
40	Posudzovanie vplyvov na životné prostredie	Environmental impact assessment
41	Uplatňovanie analytických nástrojov v rozhodovacom procese malých a stredných podnikov	Application of analytical tools in the decision-making process of small and medium-sized enterprises
43	Operačný systém Windows Server	Windows Server operating system
50	Návrh a realizácia moderných vizualizačných rozhraní	Design and implementation of modern visualization interfaces
53	Základy spracovania a analýzy údajov	Basics of data processing and analysis
57	Technológie v elektronike	Technologies in electronics
58	Optimalizácia lineárnych problémov	Optimization of linear problems
59	Základy programovania v jazyku Python	Basics of Python programming
66	Meranie elektrických veličín a metrológia	Measurement of electrical quantities and metrology
67	Operačný systému Linux	Linux operating system
68	Transfer poznatkov z výskumu digitalizácie výrobných procesov do prostredia malých a stredných podnikov	Transfer of knowledge from research on digitalization of production processes to the environment of small and medium-sized enterprises
72	Digitálna kolaborácia (videokonferenčné systémy, technológie živého vysielania)	Digital collaboration (video conferencing systems, live broadcasting technologies)
74	Programovania v jazyku Python pre strojové učenie	Python programming for machine learning
75	Strojové učenie	Machine learning
76	Návrh zákazníckych integrovaných obvodov (ASIC) #1	Designing Custom Integrated Circuits (ASICs) #1
79	Kvalita v ére Priemyslu 4.0	Quality in the era of Industry 4.0
81	Sprievodca v cestovnom ruchu	Guide in tourism
82	Medzinárodná certifikácia digitálnych zručností	International certification of digital skills

ID	SK názov	EN name
87	Interaktívna modulárna platforma pre oblasť kreatívneho vzdelávania	Interactive modular platform for creative education
90	Mobilné viacpreskokové siete v prostredí 5G/6G	Mobile multihop networks in a 5G/6G environment
92	Základy optických vláknových sietí	Basics of optical fiber networks
93	Optické prístupové FTTx siete	Optical access FTTx networks
94	Optické xWDM prenosové systémy	Optical xWDM transmission systems
97	Komplexná robotika	Complex robotics
98	Dátová analytika v jazyku Python	Data analytics in Python
101	Programovacie nástroje a administrácia informačných systémov	Programming tools and administration of information systems
104	Programovanie CNC výrobnej techniky - Siemens Sinumerik a Heidenhain	Programming of CNC production technology - Siemens Sinumerik and Heidenhain
105	Príprava na priemyselnú certifikáciu CCNA	CCNA industry certification preparation
106	Príprava na priemyselnú certifikáciu CCNP	CCNP industry certification preparation
109	Metódy medzinárodného platobného styku a podpora medzinárodného obchodu MSP s využitím digitálnych prvkov	Methods of international payment and support of international trade of SMEs using digital elements
110	Moderné digitálne nástroje pre efektívnu komunikáciu vo firme	Modern digital tools for effective communication in the company
111	Zvyšovanie finančnej gramotnosti v online priestore	Increasing financial literacy in the online space
120	Konštrukcia a riadenie pneumatických systémov	Construction and management of pneumatic systems
121	PLC riadenie a programovanie	PLC control and programming
124	Platforma eXtended Reality XR (Virtual Reality, Augmented Reality, Mixed Reality)	eXtended Reality XR (Virtual Reality, Augmented Reality, Mixed Reality) platform
127	Informačná a kybernetická bezpečnosť a ochrana osobných údajov	Information and cyber security and personal data protection
130	Manažérske rozhodovanie založené na analýze dát	Managerial decision-making based on data analysis
132	Analýza a spracovanie dát a aplikácií umelej inteligencie	Analysis and processing of data and artificial intelligence applications
138	Právo v digitálnych technológiách	Law in digital technologies
139	Psychologické vzdelávacie služby v súvislosti s adaptáciou na digitálnu transformáciu	Psychological educational services related to adaptation to digital transformation
140	GEOacademy – vzdelávanie v oblasti GIS softvéru s otvoreným kódom	GEOacademy - open source GIS software education
149	Pokročilá digitálna gramotnosť	Advanced digital literacy
150	Písanie v typografickom systéme LaTeX	Writing in the typographic system LaTeX
152	Finančná matematika s využitím nástroja MATLAB	Financial mathematics using the MATLAB tool
153	Metalické počítačové siete	Metallic computer networks
157	Časový, vecný a risk manažment v zahraničnom obchode v súlade s kybernetickou bezpečnosťou	Time, material and risk management in foreign trade in accordance with cyber security

ID	SK názov	EN name
158	Digitalizácia metalurgického priemyslu so zameraním na simulácie tepelných procesov, prúdenia kvapalín v programe Ansys Fluent	Digitization of the metallurgical industry with a focus on simulations of thermal processes, fluid flow in the Ansys Fluent program
159	Digitalizácia metalurgického priemyslu v programe Ansys Discovery, DesignModeler, SpaceClaim	Digitization of the metallurgical industry in Ansys Discovery, DesignModeler, SpaceClaim
161	Návrh zákazníckych integrovaných obvodov (ASIC) #2	Design of Custom Integrated Circuits (ASIC) #2
162	Návrh zákazníckych integrovaných obvodov (ASIC) #3	Design of Custom Integrated Circuits (ASIC) #3
163	Modelovanie spaľovania pre digitalizáciu metalurgického priemyslu	Combustion modeling for the digitization of the metallurgical industry
164	Aplikácia termodynamického programu HSC Chemistry v oblasti digitalizácie metalurgie	Application of the HSC Chemistry thermodynamic program in the field of digitization of metallurgy
169	Využívanie softérových nástrojov pre digitalizáciu objemových tvárniacich procesov	The use of software tools for the digitization of volume forming processes
181	Komunikácia orgánov verejnej moci na sociálnych sieťach	Communication of public authorities on social networks
190	Ochrana duševného vlastníctva v online prostredí	Protection of intellectual property in the online environment
193	Digitálny tím: adaptácia na digitálnu transformáciu	The digital team: adapting to digital transformation
206	Základy kreslenia v programe CATIA	Basics of drawing in the CATIA program
217	Vytvorenie, zavedenie a udržanie politiky sociálnych sietí v organizácii	Creation, implementation and maintenance of the social network policy in the organization
218	Boj proti dezinformáciám	The fight against disinformation
219	Rast transparentnosti a otvorenosti organizácie	The growth of transparency and openness of the organization
220	Vypracovanie alebo revízia etického kódexu zamestnancov organizácie v digitálnom prostredí	Drafting or revising the code of ethics of the organization's employees in the digital environment
241	Rastový program pre startupy	Growth program for startups
262	Elektronický obchod	E-shop
263	Práca s dátami (databázy a vizualizácia dát)	Working with data (databases and data visualization)
264	Systém SAP	SAP system
321	Audit digitálnej pripravenosti subjektu	Audit of the subject's digital readiness
327	Školenie základov KB a smernice NIS2	KB basics training and NIS2 guidelines
328	Digitálne inovácie v stavebníctve	Digital innovations in construction
329	Získavanie EÚ zdrojov v oblasti digitalizácie	Acquisition of EU resources in the field of digitization
330	Využívanie digitálnych informačných modelov a virtuálnych technológií pre riadenie a kontrolu stavebných prác	Use of digital information models and virtual technologies for management and control of construction works
331	Digitalizácia procesov územného plánovania	Digitization of spatial planning processes
332	Digitalizácia v stavebnom konaní	Digitization in the construction process

C - Project support and support in finding new sources of funding
C - Projektová podpora a podpora v oblasti získavania nových zdrojov financovania

ID	SK názov	EN name
83	Poradenské a konzultačné služby pri príprave, implementácii a administrácii projektov v oblastiach digitalizácie a inovácií	Advisory and consulting services in the preparation, implementation and administration of projects in the areas of digitization and innovation
114	Komplexné konzultačné služby - granty a projektový manažment	Comprehensive consulting services - grants and project management
265	Prepájanie MSP s investormi zameranými na early-stage investície a rizikový kapitál	Connecting SMEs with investors focused on early-stage investments and venture capital

D - Connecting small and medium-sized enterprises to domestic and foreign partners
D - Prepájanie malých a stredných podnikov na domácich a zahraničných partnerov

ID	SK názov	EN name
73	Realizácia živých vysielaní a virtuálnych videokonferenčných podujatí so záznamom	Realization of live broadcasts and virtual video conference events with recording
77	Inovácie, ochrana duševného vlastníctva, transfer technológií	Innovations, intellectual property protection, technology transfer
118	Tlmočnícke služby - simultánne tlmočenie, konferenčné tlmočenie	Interpreting services - simultaneous interpreting, conference interpreting
119	Prekladateľské služby – preklad, postediting	Translation services – translation, postediting
211	Podpora obstarávania inovácií - Vyhľadanie a prieskum výskumno-vývojových tímov, riešení a prototypov v Európskom výskumnom a vývojovom priestore	Innovation Procurement Support - Finding and exploring research and development teams, solutions and prototypes in the European Research and Development Area
244	Tlmočnícke služby - simultánne tlmočenie, konferenčné tlmočenie - so zabezpečením tlmočníckej techniky	Interpreting services - simultaneous interpreting, conference interpreting - with provision of interpreting equipment