

*A State of Art: European wide cluster of five interconnected nodes for innovations development, education and for generation of new start-ups benefiting of the latest cloud computing technologies*

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DIGITAL INNOVATION HUB FOR CLOUD BASED SERVICES



## Content

.....	1
Introduction.....	3
1. Core elements of the Cluster.....	3
1.1. A Cluster of interconnected nodes (sub hubs).....	3
1.2. The core stakeholders of the Cluster.....	3
2. The Cluster builds the community and maintains the services .....	5
2.1. The operational model of the cluster .....	6
2.1.1. The DIHUB Steering Committee .....	6
2.1.2. DIHUB management.....	7
2.1.3. The DIHUB online platform .....	7
2.1.4. The promotion and dissemination of cluster activities .....	8



DIHUB

## Introduction

The Digital Innovation Hub for Cloud Based Services - DIHUB – is an EU-funded project under the ERASMUS+, Key Action 2, and Sector Skills Alliances programmes. The main aim of the HUB is to provide a European-wide, transnational, interconnected service platform and network for cloud-based services and technologies. Partners from five European countries have worked together to develop a hub model of clustered nodes. These hubs are learning and development environments to VET students, teachers as well as for companies. In the hub, students can update their future, their knowhow, skills, and digital service creation skills for companies.

The purpose of this document is to present a holistic view of the cluster, how it works in practice at the operational level and how it is maintained in the long run.

This deliverable is part of the WP1 of the DIHUB Project.

### 1. Core elements of the Cluster

#### 1.1. A Cluster of interconnected nodes (sub hubs)

Originally, DIHUB consists of five interconnected nodes originating from the Erasmus+ project under the European initiative Centres of Vocational Excellence. These interconnected nodes (or sub hubs) are located in Bulgaria, Croatia, Estonia, Finland and Portugal, where the 11 partners of the DIHUB project are based. After the DIHUB services and activities have been piloted, DIHUB will be expanded to other VET providers and stakeholders in Europe for supporting the local and European innovations through cloud-based solutions.

#### 1.2. The core stakeholders of the Cluster

The DIHUB project partners and other VET providers, companies, and businesses support organisations in facilitating DIHUB development and provision of services to support the adoption of cloud-based solutions. The core stakeholders of DIHUB are shown in the diagram below, while a broader stakeholder view can be seen from the DIHUB stakeholder description at the European and project countries level. (DIHUB Stakeholder analysis)



# DIHUB

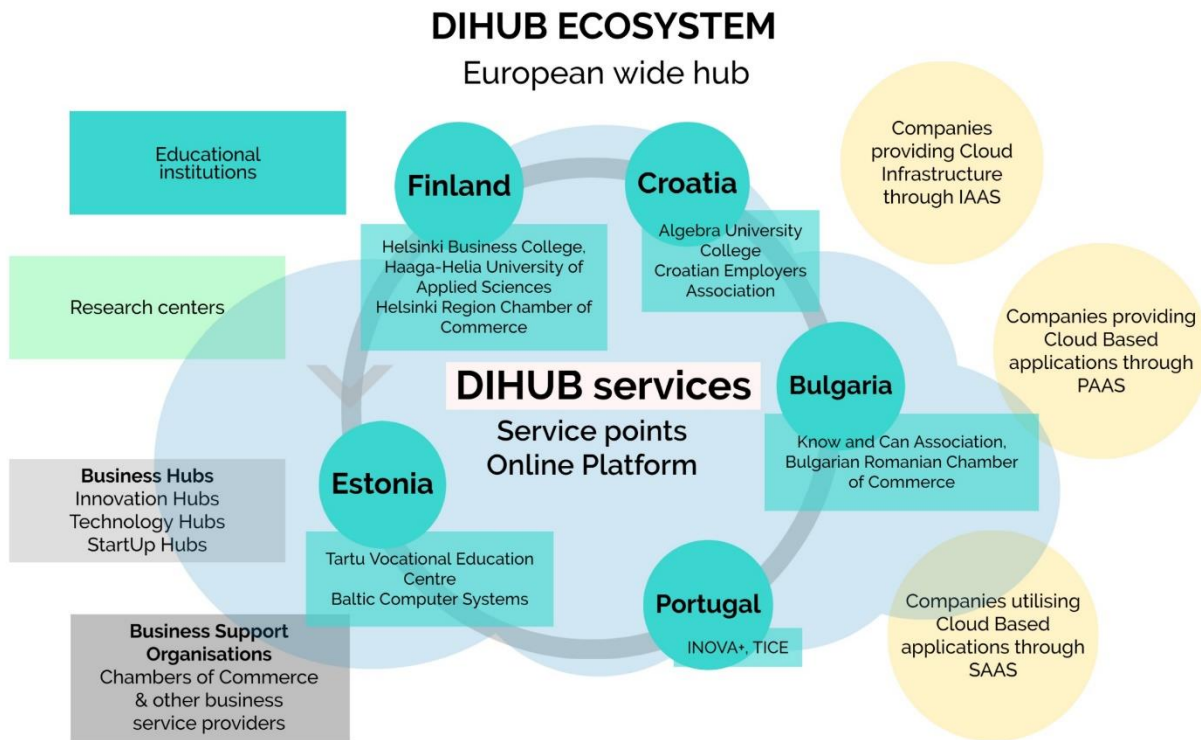


Diagram 1. The core stakeholders of the Cluster

As DIHUB is further developed, the aim is to engage all the types of relevant stakeholders in a Digital Innovation Hub as highlighted also by JRC: “A DIH is a regional multi-partner cooperation (including organizations like RTOs, universities, industry associations, chambers of commerce, incubator/accelerators, regional development agencies and even governments) and can also have strong linkages with service providers outside of their region supporting companies with access to their services”.

In the **stakeholder analysis**, the **DIHUB ecosystem**, in which the cluster operates, is introduced in more detail. In this practical analysis, the following approach to building the ecosystem is analyzed:

- Objectives of Creating the Cloud Based Innovation Ecosystem
- Cloud Computing and Services: Terms and Roles
- The Cloud-Based DIHUB Innovation Ecosystem
  - European digitalization policy and key stakeholders
  - Finish digitalization policy and key stakeholders
  - Bulgarian digitalization policy and key stakeholders
  - Croatian digitalization policy and key stakeholders
  - Portuguese digitalization policy and key stakeholders
  - Estonian digitalization policy and key stakeholders



# DIHUB

The DIHUB model is based on a European wide service platform in cloud-based services designed for students, teachers, coaches, and small and medium-sized enterprises (SMEs). The DIHUB is also a business hub for speeding up cloud based digital innovations in SMEs (from micro innovations to larger ones).

The DIHUB model is introduced in a separate document (WP2 outcome) where DIHUB processes are described in more detail.

## ***2. The Cluster builds the community and maintains the services***

The DIHUB offers a service platform for facilitating services and collaboration of all the stakeholders involved in and enlarging the DIHUB community. It will continue to grow and develop during coming years after the project itself has ended.

The coordinator of the project maintains the digital online platform as well as the core services as a part of its service structure. As a VET provider, the coordinator has all the service elements embedded in its own processes. Typically, hubs are run and managed by a dedicated community organisation, but with substantial input and influence from the community (cluster).

The DIHUB facilitates community building by providing a place where different local, national, European, and international partners can come together and address the issues that matter most to them in developing cloud-based services, upskilling, and reskilling. The DIHUB can therefore support a focused community-led approach in the realm of cloud technology and services. Initial project partners form the core of the community and are committed to the development of the DIHUB.

The DIHUB provides services for the community, but also by the community. Local partners are involved in making decisions about how services are run, how training is managed, as well as in supporting delivery through volunteering (or paid services) as well.



# DIHUB

## 2.1. The operational model of the cluster

At the initial stage, the cluster is based on the participation of project partners in five partner countries and the stakeholders they have gathered. The following diagram describes the basic elements of the cluster:

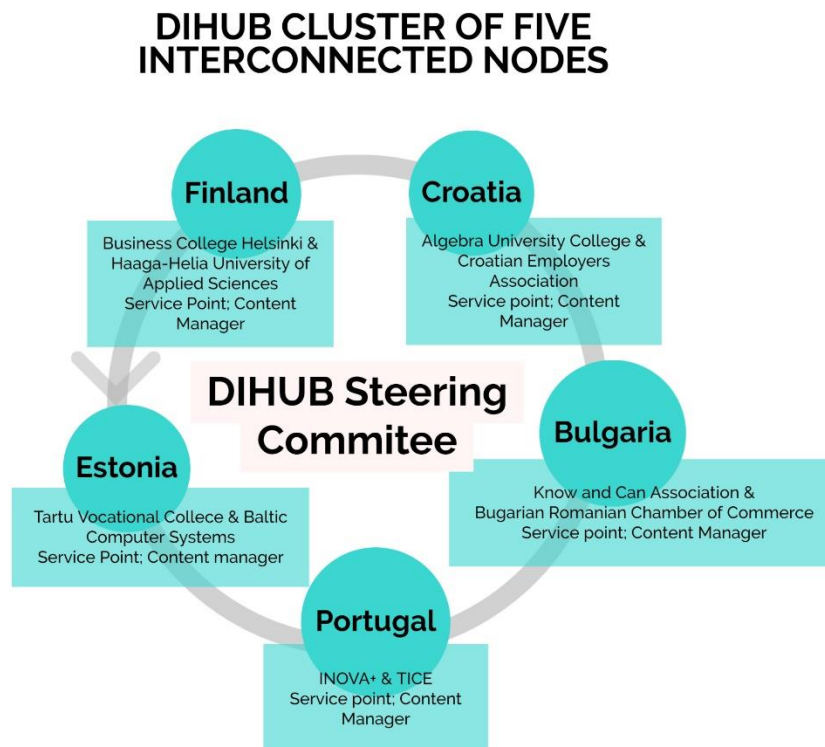


Diagram 2: DIHUB Cluster of five interconnected nodes

### 2.1.1. The DIHUB Steering Committee

The DIHUB is managed by the **DIHUB Steering Committee**, which is an advisory body. It meets twice a year, in February and in September. Additional meetings are held when necessary. The duties of the Steering committee are the following:

- the overall task of getting the DIHUB cluster to function, getting the DIHUB services to flourish, and to manage the DIHUB community
- making sure the DIHUB community is working to realize business objectives set in the hub model
- monitoring the progress of DIHUB development and service delivery
- taking care of the resources needed for continuous development work and running the DIHUB services (including possible new development projects)
- approving any changes related to the number of the partners and members of the DIHUB community



**DIHUB**

When the DIHUB -project has ended, the **Coordinator, Helsinki Business College**, will call one member from each partner country to participate the DIHUB steering Committee to continue steering the cluster and the DIHUB services.

### 2.1.2. DIHUB management

In each partner country, one **DIHUB content manager** will be nominated. The manager will be responsible for the following duties:

- managing the international and local DIHUB operations
- developing the overall DIHUB operations as part of the cluster
- running the local DIHUB operations
- taking care of the content updates of the DIHUB service platform especially at the partner country level as well as at the European (international) level

The DIHUB content managers are nominated by project partners in each partner country and resources are allocated by partners as agreed by them at the local level.

### 2.1.3. The DIHUB online platform

The DIHUB online platform will be managed and maintained by Helsinki Business College. Helsinki Business College is responsible for the technical development of the online platform as well as for resourcing the maintenance of the platform at least five years after the project has finished. The overall target is to have continuous service platform maintenance for years to come.

The project web pages present the general information about the DIHUB-project itself (**dihubcloud.eu**). Based on the DIHUB model and online platform, the operations will continue after the project. Technically, the online platform is based on the landing page and share point solution, where all community members will sign in and share information to maintain the hub processes. The online platform can be found in the following address: **dihub.cloud**



# DIHUB



### 2.1.4. The promotion and dissemination of cluster activities

The promotion and dissemination of the Cluster activities, the DIHUB model, and the platform falls into the DIHUB project dissemination strategy. As stated above in this document, the DIHUB model and platform will be a **one-stop-shop** for all DIHUB stakeholders to interact in and to get hold of the services, skills, and innovations they need. ***Thus, the DIHUB will be a bridge between the various stakeholders for creating a European wide cluster of five interconnected nodes for innovations development, education, and generation of new start-ups benefiting from the latest cloud computing technologies.***



# DIHUB

### PARTNERS



Helsinki Business College  
(Finland)



INOVA+ (Portugal)



Know and Can Association  
(Bulgaria)



Bulgarian-Romanian  
Chamber of Commerce and  
Industry (Bulgaria)



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# DIHVB