

Profile in details and track record of the cluster

Projects

For the period 2018 - 2024, the cluster took part in 10 projects, with the help of which it strengthened its presence in the innovative ecosystem of the city of Sofia and positioned itself as one of the organizations supporting the achievement of the goals of ISIS and the Digital Transformation Strategy of the city of Sofia, thus providing a field of activity for the benefit of its members.

1. Project Strengthening the organizational and administrative capacity of CSKC

The project aimed to contribute to building the organizational and administrative capacity of the newly established cluster, including developing a strategy and master plan for development, positioning the target market with the city of Sofia with a number of initiatives, events and participations, and strengthening internationalization for the benefit of the members. The project was implemented in the period November 2017 - April 2019 and received a high rating after monitoring by the MA in 2022.

- **Funding program:** Operational Program "Innovation and Competitiveness" "Development of Clusters in Bulgaria"; BG16RFOP002-2.009-0018-C01
- **Funding body:** Ministry of Economy and Industry
- **Amount of funds spent:** Total amount of the project 484 thousand BGN, including grant of 387 thousand BGN and own financing of 97 thousand BGN.

2. MediaMotor Europe (MME) project (<https://www.knowledgesofia.eu/en/mme-hub-en>)

MediaMotorEurope (MME) aimed to select 60 European innovative startups in the media industry and help them establish themselves on the market in solving the challenges in this industry. The project was implemented in the period 2020 - 2022. Through consulting, mentoring and co-financing within 3 open calls, the partners in this project identified 61 European innovative companies (startups) from the media industry and organized 3 support cycles for them. 4 innovation hubs were established in Sofia, Bergen, Brussels and Thessaloniki, whose role was to provide a package of services and access to an international network of mentors, experts and investors for the selected companies. The selected companies took part in a 6-month intensive mentoring program and specialized training (workshops) and were provided with: access to the international technological media market and new customers; participation in important and emblematic events with the opportunity to present and in meetings to find partners; 47 startups had access to a network of investors, to whom they presented their investment needs.

- **Funding program:** HORIZON 2020; H2020-ICT-2018-20/H2020-ICT-2019-2
- **Funding body:** European Commission
- **Amount of funds spent:** 1,952 thousand euros including 248 thousand euros for the cluster

3. Project "Smart Skills for Smarter Cities" - Skills4Cities (<https://www.skills4cities.eu/>)

The main objective was to prepare a relevant environment for training and validation of specialists involved in the administration and management of smart cities. The project supported the mapping of competencies, the development of a reference framework for competencies and tools for their verification and validation, new curricula and materials necessary for training in disciplines related to smart city management, rules for certification of professional roles in smart city management. The results of this project are considered to be one of the first in Europe that are applicable to the development of new competencies in the development, management and implementation of Smart City projects. Two international conferences were organized in Sofia and Cluj-Napoca for their dissemination. The project provided a basis for future training and certification of **three new professions:** Smart City Project Development Expert, Smart City Project Manager, Smart City Project Management Consultant.

- **Funding program:** ERASMUS+.
- **Funding body:** European Commission, Center for Human Resources Development in Bulgaria
- **Amount of funds spent:** 190 thousand euros including 32 thousand euros for the cluster

4. European Technologies for Sustainability (eT4s) project (<https://www.smartcitytech.eu/>)

The project created a strategic framework for the internationalization of European clusters through direct partnerships with leading innovation hubs in North America and ASEAN. Implemented in 2020-2022, the project focused on technology-based solutions addressing sustainability challenges in urban areas (water, air, energy, waste). It is also a result of the Smart City Tech partnership network, of which CSKC is a member. ET4S was implemented by a consortium consisting of several partners, members of the network. An internationalization strategy was implemented and new contacts were developed with Canada, China, Taiwan and Singapore. Starting from these "bridge" contacts, the aim was to explore new regions in North America (with a focus on Canada) and ASEAN/Asia (with a focus on Taiwan and Hong Kong).

- **Funding program:** COSME.
- **Funding body:** European Commission
- **Amount of funds spent:** 448.8 thousand euros including 62 thousand euros for the cluster.

5. Project "Towards Green Transition Facility" - TGTF (<https://www.knowledgesofia.eu/en/news/431-the-towards-green-transition-facility-winners-are-announced>)

The project was implemented in the period June - October 2021. It aimed to popularize the topic of "green" transformation among the cluster members and business partners and to provide direct support for the development, implementation and cooperation of "green" business models in the areas of energy efficiency, air measurement and monitoring, resource management, water monitoring and quality, digital recycling solutions, waste management, asset and building management. For this purpose, the cluster received direct grant technical assistance under the European Cluster Collaboration Platform (ECCP). Seminars were held, five of the cluster members participated in individual sessions with the ECCP consultant on the topic. A "Green transition road map" was developed, which is currently a permanent methodological tool for the cluster's work in this area. Other representatives of the cluster members were included in a training course for mentors on green transformation

- **Funding program:** COSME
- **Funding body:** European Commission / ECCP
- **Amount of funds spent:** Consulting services

6. "eXperiential Digital Hub for media and creative industries" project - XD Media Hub (<https://xdmediahub.eu/>)

The XD Media HU project was implemented in the period 2022 - 2024 with the participation of the cluster and 6 other partners from Bulgaria, Spain, Portugal, Ireland and the Netherlands. The lead partner of the project was CEED - Bulgaria, which is also a member of the cluster. The project had the following objectives: aimed at enhancing the digital competences of entrepreneurs, managers and owners of high-tech start-ups. The project partners disseminated information and knowledge about business development opportunities in the media and creative industries and created and implemented new tools, learning modules and training courses to support professional training for entrepreneurs and managers in these industries.

- **Funding program:** Erasmus+, KA2 - VET
- **Funding body:** European Commission, Center for Human Resources Development in Bulgaria
- **Amount of funds spent:** 294.5 thousand euros including 42.5 thousand euros for KSGZ

7. Project "Development of Green Skills for Better Employability" - DEGREBE (<https://degrebe-project.eu/>)

The DEGREBE project was implemented by a total of 6 partners from Hungary, the Czech Republic, Greece, Bulgaria and Cyprus in 2022-2024 and aimed to offer support tools for the development of green and transferable skills. A digital educational package for the development of innovative approaches, digital technologies and entrepreneurial skills for a green economy was developed and tested, designed for young professionals and students from the agricultural sector. Taking into account that more and more employers are looking for personnel among candidates who can demonstrate the presence of appropriate "green skills", the project proposed pedagogical, administrative, technical and organizational changes in the learning process and the use of new technologies. An online interactive game for students and young

professionals and a manual for trainers using gamification in the learning process were developed and tested.

- **Funding program:** Erasmus+, KA2 - VET
- **Funding body:** European Commission, Center for Human Resources Development in Bulgaria
- **Amount of funds spent:** 315.6 thousand euros including 40.2 thousand euros for KSGZ

8. Project "Development and use of flexible and digital tools for increasing digital skills of vocational students and employees in retail trade" - Digiskill-Retail (<https://degrebe-project.eu/>)

The project was implemented by 4 partner organizations from Germany, Bulgaria, Estonia and Greece in the period 2022-2024. The aim was to increase digital competences and skills in the retail sector (for employees and trainers) through the use of modern, retail-specific e-learning modules. An analysis of the skills and knowledge gaps of the target group was carried out and a competence framework with a curriculum, case studies and materials were developed. Through specialized workshops, the systematic use of electronic modules in vocational education by students and teachers in this industry was encouraged in

- **Funding program:** Erasmus +
- **Funding body:** European Commission, Center for Human Resources Development in Bulgaria; No 2022-1-DE02-KA220-VET-000089396
- **Amount of funds spent:** 250 thousand euros including 45.6 thousand euros for KSGZ

9. Project "GO GREEN: Supporting the acquisition of Green Skills in VET through work-based learning" (<https://gogreenvet.eu/>)

The project was implemented by a consortium of 6 partners from 5 European countries. It started in September 2022 and ended in September 2024. The aim of the project was to create tools for upper secondary school students and VET students to develop green skills and competences during their apprenticeships and internships in enterprises. A toolkit was developed for a gradual change in the attitudes and daily behavior of businesses to implement green practices, following the global trend in this area. The project contributes to the objectives and priorities of the EU (e.g. Green Deal, New Skills Agenda, etc.) and practically provided conditions for the development of digital skills through training of a group of teachers from the participating countries.

- **Funding program:** Erasmus + KA220-VET Cooperation partnerships in vocational education and training; No. 2022-1-NL01-KA220-VET-000089335
- **Funding body:** European Commission
- **Amount of funds spent:** 250 thousand euros, including 40.8 thousand euros for the Central Hospital for the Prevention of Cancer.

10. Project "Innovation Vocational Excellence and Sustainability in Tech" - InvesTech (<https://investech-cove.eu/>)

This four-year project started in 2024 and is currently being implemented by 18 partners from 5 European countries - Slovakia, Greece, Bulgaria, Cyprus and Lithuania. The lead organization and project manager is the Technical University of Košice, Slovakia. The project aims to establish 5 Centers of Excellence in Vocational Education and Training (CoVEs) in ICT in the five countries. Through its activities, the project will contribute to developing the innovation potential of VET to play a key role in supporting innovation, skills development, the green transition and social inclusion in these countries. The specific objectives include forming long-term partnerships between business and education to serve the local skills ecosystem, enhancing the innovation culture in the context of the national ISIS, developing a transnational cooperation platform, developing microcredits and online courses tailored to the needs of ICT, promoting innovative entrepreneurship, etc.

- **Funding program:** Erasmus +
- **Funding body:** European Commission
- **Amount of funds spent:** 1,960 thousand euros, including 225 thousand euros for the Central Hospital for the Prevention of Cancer.

Networks

- Membership of the cluster in the Smart City Tech Partnership - an association of European clusters for smart cities;
- Participation of the cluster in the European Innovation Partnership on Smart Cities and Communities (EIP-SCC) activity – the participation of the cluster is indicated in the Acknowledgement
- Membership of the cluster in the Council for Innovation, Digitalization and New Technologies at the Bulgarian Chamber of Commerce and Industry (<https://www.bcci.bg/s-inovation-bg.html>).
- Cluster Agreement for Joint Activities with Sofia Tech Park
- Cluster Agreement for Joint Activities with the Association of Industrial Capital in Bulgaria;
- Cluster Agreement for Joint Activities with the Investment Council of the Bulgarian Chamber of Commerce and Industry;
- Memorandum of Understanding and Cooperation with Industrial Technology Research Institute (ITRI), Taiwan;
- Cooperation Agreement with the CEE Chamber of Commerce in Singapore – signed agreement attached
- Memorandum of Cooperation with Sofia Invest.
- Memorandum of Understanding for the establishment of a working group for the development of the Krasna Polyana region, Sofia Municipality
- Memorandum of Cooperation with ARIES Transylvania, Cluj-Napoca, Romania
- Registrations in digital transformation and smart cities platforms
 - www.smartcitycouncil.com
 - www.cityprotokol.org
 - www.sharingcities.eu
 - www.beesmart.city
 - www.smartcitiesworld.net
 - www.digitallytransformyourregion.eu

Vision, structure, and potential

At the strategic and operational level, the Sofia Knowledge City Cluster (www.knowledgesofia.eu) is managed by decisions of the General Assembly (on strategic issues, when investments are needed and when opening business activities and representative offices) and at the operational level by the Management Board, which follows the Statute and strategic documents of the cluster. Coordination is carried out by an Executive Director and a Cluster Coordinator. In different periods of its development, the cluster organization has applied different models for operational management and administration depending on its financial capabilities. Currently, in its operational activities, the cluster relies on an executive director and project manager, an accountant, as well as the members of its management bodies, who have internal specialization in terms of operational activities. The vision of the cluster is to be an initiator and participant in the process of transforming Sofia from a traditional administrative capital into a city of knowledge and a smart city that builds and maintains a sustainable high quality of life and good governance, by supporting the development of businesses based on innovation and knowledge. Its mission is to unite businesses from the knowledge-intensive sectors with that of the municipality, scientific, development, educational and financial organizations to realize the concept through the implementation of the Smart Specialization Strategy of Sofia and the Digital Transformation Strategy of the city.

The strategic goal of the cluster is to build its own model for a knowledge city and a smart city and to create investment prerequisites for its implementation through business initiatives and projects that it will manage for the benefit of its members and the entire innovation ecosystem of the city.

Through its activities, the Cluster Sofia Knowledge City creates prerequisites for transforming the city into a national and regional center for education, modern research, innovation and entrepreneurship, based on new smart technologies, by mobilizing its own and attracted resources. As an open association of an unlimited number of interested representatives of business, science and education, the cluster managed to

organize its own capacity for effective use of the city's human and material resources in the creation of an "innovative ecosystem" and a "skills ecosystem", based on the experience of the leading knowledge cities in the world.

Members of the cluster and members of its governing bodies have participated in the following:

- Development of the Innovation Strategy for Smart Specialization of the City of Sofia - Prof. Rumen Nikolov and Prof. Kostadin Kostadinov
- In meetings and consultations with the Sofia City Council team to develop a Vision for Sofia
- In workshops to develop a Digital Transformation Strategy – Dimitar Hristov
- In proposals regarding NUTS in Bulgaria – Belin Mollov
- In the advisory councils of the SO -

Involvement in initiatives

During the period of the cluster's existence, initiatives have been undertaken, some of which are related to or supported by the implemented projects and others that were generated by the cluster or its members.

The more important ones were:

- Proposals in the form of reports, letters and meetings with the mayor of Sofia, including for the creation of the Sofia - Smart City Board, the establishment of a Sofia City Award for companies that have attracted the most talent from abroad, an annual knowledge week following the example of Vienna, the city of knowledge, a biennial Sofia - Smart City Expo, etc.
- Participation of representatives of cluster members in partnership with the Sofia Development Association (SDA) in the development of an Innovation Strategy for Smart Specialization (ISS) of the city of Sofia
- Ensuring membership of Sofia Municipality through ARL in the European Network of Living Labs (ENoLL) based on a conceptual report developed by Rumen Nikolov - member of the cluster's Management Board
- Development of a marketing strategy with a plan to transform Sofia into a smart city
- Market research for the smart city technology market in Sofia
- Development of an online platform for smart city technologies for Sofia (Sofia Smart City Marketplace)
- Creation of an innovation hub for the creative and media industry - based on several partnership agreements and the results of the MediaMotor Europe project.
- Innovation accelerator – based on an agreement between several cluster members in support of the MME project
- Intercluster Center for Innovation and Competences for Smart Cities – based on agreements with IKEM and MBU.

Visibility

- International conference "Sofia - City of Knowledge", under the patronage of Sofia Municipality together with Investor Media Group and a working panel on September 29 "Sofia Knowledge Café". (September 28-29, 2017)
- Conference with international participation Knowledge & Smart Cities - Creating a market for smart cities and communities - Integrated planning & regulatory policies; under the patronage of the Mayor of Sofia Yordanka Fandakova in partnership with Telelink, EIP-SCC, Sofia Development Association, Sofia Municipality, Sofia Investment Agency and Sofia Tech Park (Sofia Tech Park, November 26, 2018)
- Conference with international participation Sofia Smart City Marketplace – on April 17, 2019 during the 7th Southeast European Exhibition "Smart Cities" at Inter Expo Center, organized by cluster member Via Expo and with an organized common cluster stand with the participation of over 20

cluster members, spatially and logically formed into three groups: education - science - business (April 16-18, 2019).

- Seminar "Tools for Open Innovation", Sofia Tech Park, within the framework of the Innovation Hub for Media and Creative Industries with the support of Sofia Tech Park, the Association of Industrial Capital in Bulgaria and the Investment Council of the Bulgarian Chamber of Commerce and Industry (October 21, 2020).
- Seminar with international participation "The Smart City Project - a building block for digital transformation", jointly with UNIBIT, within the framework of the Skills4Cities project (April 28, 2022).

International webinars organized

- "Enter the Dragon: Conquering Asian Markets through the Hong Kong Science and Technology Park". A joint initiative of Invest Hong Kong (InvestHK) and the Sofia City Cluster within the Smart City Tech Partnership (March 25, 2021).
- "In Search of High-Tech Inspiration", jointly with the Investment Council of the Bulgarian Chamber of Commerce and Industry within the framework of the MME and the Startup Innovation Accelerator initiative. (April 28, 2021).
- "The Transition of Cities to a Green Economy - Approaches and Practices", within the framework of the Green Transition Facility (TGTF) technical assistance to the European Cluster Cooperation Platform (ECCP), (September 10, 2021).
- "Mapping Technologies and Design Thinking for Smart Cities", within the framework of the supported Smart by Design project of the cluster member KUZIS (September 24, 2021).
- "Smart City Technology Partnership - EU - Taiwan", within the framework of the cooperation with the Taiwan Industrial Technology Research Institute (ITRI) with the participation of Telelink Infra Service and ADD from Bulgaria and Taipei Computer Association and Mitac Information Technology Corporation (September 29, 2021).
- "Internationalization of Industry 4.0 - Taiwan - EU", jointly with the Industrial Technology Research Institute (ITRI) and the participation of 4 companies from Taiwan - Fair Friend Group, Chewren Industries Co, Techman Robot Inc and Precision Machinery R&D Centre and 4 companies from Europe Nearsoft Europe, AIOTI, AI REGIO and Department of Management and Production Engineering, Politecnico di Torino (March 10, 2022).
- "Digital Transformation Around the World - Taiwan - EU", jointly with ITRI with the participation of 3 companies from Taiwan - Wistron Technologies, Quanta Cloud Technology, Chenlong Technology Co., Ltd and 4 from Europe - PetaSC and GATE Institute from Bulgaria, Bulgaria and MEC and DIGITALL from Italy (May 12, 2022).

Involvement in international business missions

USA Smart City Tech - within the eT4S project from May 1 to 6, 2022. Two cluster members are participating for:

- Circular City Week exhibition in New York including visits to facilities related to the circular economy
- meeting with the Director of Sustainable Development of the City of Ithaca and participation in discussions on circular economy at Cornell University
- visit to Lake Cornell cooling system and thermal power plant.

SINGAPORE – within the framework of the eT4S project from 17.10 to 21.10.2022. Five cluster members are participating in a combined program of events in Singapore:

- Industrial Transformation ASIA-PACIFIC (ITAP) - a HANNOVER MESSE event
- EU-Singapore Matchmaking Event of the European Cluster Cooperation Platform (ECCP).

- AMEC Spain - visits
- Cluster business meeting program

CANADA - within the framework of the eT4S project from 07.11 to 11.11. 2022. One cluster member has joined to participate in a combined program in Toronto and Montreal.

International activities

- Participation in international projects and related workshops and seminars abroad (Singapore, Toronto, Montreal, Bilbao, Budapest, Krems, Cluj, Cyprus, etc.)
- Participation in workshops, seminars and webinars organized by foreign partners
- Participation in initiatives of the European Cluster Cooperation Platform (ECCP) – Thessaloniki (2017), Brussels (2018), Lyon (2019)
- Business visits on cluster initiatives - Barcelona, London (2018), Bolzano, Trento, Verona Italy (2018), Vienna and Graz (2018), Ljubljana (2018),
- Welcoming delegations from: Turkey, China, Belgium.

Interconnectedness making a cluster

The cluster is not an industrial cluster, but a knowledge cluster, which determines its specificity in terms of internal connectivity. It is an alliance of regular and associated members with a total annual average of approx. 60 legal entities, including companies, universities, research and development organizations and non-governmental organizations. The type of economic activity of the members is: IT services and publishing; computer and communication equipment; research organizations; business support organizations; training and education organizations; consulting, architectural and engineering services.

The core of the cluster is a network of interconnected companies - manufacturers and suppliers of IT products and services (IT infrastructure, software solutions, databases, information systems, etc.) and business services (publishing, radio, television, printed publications, creative activities, event organization, business management, information services, etc.). The second group is non-profit organizations, which are an important partner of companies in the transformation process: information - knowledge - innovation. They provide training and implement projects in support of information technologies of the future, innovation and entrepreneurship, talent attraction and technology transfer. The cluster also includes internationally recognized scientific institutes of the Bulgarian Academy of Sciences in the field of computer science, which covers the triangle of knowledge: business - science - education.

Selected representatives of the individual groups in the knowledge triangle are as follows:

- High-tech companies - CIELA Norma, David Holding, RISK Electronic, ADD Bulgaria, Growyze, Alpolyees (Intellect Consult), Lemi Trafo, Kontrax, etc.;
- Education and Professional Training Sector - University of Library Science and Information Technologies, International Business School, Higher School of Telecommunications and Post, Higher School of Transport, Ivan Apostolov Private Language School, Club for Knowledge Management, Innovation and Strategies, Evrika Foundation, InnobizAcademy, etc.
- Science / R&D - Unified Innovation Center of the Bulgarian Academy of Sciences, Institute of Information and Communication Technologies - Bulgarian Academy of Sciences, GATE Institute (SU), Foundation Institute of Technology and Development, etc.

Over 80% of the existing relationships and connections between members are currently mainly of the "supplier - client" and "contractor - subcontractor" type. About 20% of the connections are of the "consultant - grant beneficiary" and "partners in projects" type. The cluster organization itself, as a separate legal entity, has formed consortia with its members for the implementation of specific projects and initiatives (for example, with UNIBIT, CEED, International Business School, KUZIS, CHIRON-MK, CHEU Iv. Apostolov, EIC-BAS, David Holding, CIELA, etc.).

Structure and level of participation of members

The structure of the cluster is defined by the Statute and specified in the Internal Regulations of the organization. Both documents were adopted at the General Assembly and define the possible framework, which over the years has been implemented in its entirety or partially, depending on the current situation and the capacity of the organization. In its entirety, the cluster organization is managed by a General Assembly and a Management Board, and the cluster administration has included the following positions: Cluster Manager; Cluster Coordinator; Financier - Accountant; International Activity Expert; Business Development Expert; Marketing and PR Expert and Internal and External Communication Expert.

Currently, the operational activities of the cluster are carried out by an Executive Director, a project manager and an accountant (accounting firm). The remuneration for all three positions is provided through the budgets for the implementation of specific projects, under which the relevant persons carry out the activities set out in the project.

There is a specialization for individual members of the cluster, which is agreed upon within the framework of the annual General Meetings.

Common cluster activities such as "Organizing an event", "Preparing a project proposal", "Inclusion in a business mission", "Participation in a webinar", "Internal development project", "Conducting the Sofia City of Knowledge Club", "Co-financing initiatives", "Positioning cluster products and services", "Attracting new members", "Cooperation agreements", "Consultations on new projects and programs", etc. are organized by the relevant interested members with the direct assistance and coordination of the ID and the Management Board. Each member has direct access or may request such access to the accumulated experience and ready-made models in the above-mentioned forms of common cluster activities

Involvement of educational and scientific organizations

Education and science are widely represented in the Sofia City of Knowledge Cluster. The cluster currently has five educational organizations as members, including four universities (UNIBIT, International Business School (IBS), Higher School of Telecommunications and Post, Higher School of Transport) and one secondary school - Ivan Apostolov Secondary School.

Members of the cluster include scientific and development organizations from the Bulgarian Academy of Sciences (Unified Innovation Center of the Bulgarian Academy of Sciences, Institute of Information and Communication Technologies - BAS) as well as R&D organizations such as the GATE Institute (at the Sofia University), the Institute of Technology and Development Foundation, the Association for Treatment of COVID-19 with Convalescent Plasma, the National Academic Library and Information System Foundation and the GIS-TRANSFER CENTER Foundation.

There is a mechanism in the cluster for generating projects and initiatives. The initiator can be the Board, the Advisory Council, as well as any member of the cluster. A decision is made by the Board only when the cluster will have to participate as a legal entity in the cluster initiative or project. The initiative is announced in the internal communication system and on the organization's website. The cluster mediates in the creation of a specific mechanism for ensuring the development of the project, study or joint activity, relying on the support of several professional consulting organizations that are members of the cluster and have experience and specialization in a specific area of business, project management or investments

Innovative products or services implemented

As a holder and an independent organization (NGO), the cluster can list innovations that have been developed with the participation of cluster teams and its members within the framework of implemented projects and cluster initiatives. These are new and innovative methodologies, collections of materials, platforms and manuals intended for the cluster's target groups, to which free access is provided for anyone interested.

List of innovative products of Cluster Sofia City of Knowledge

- Market platform for innovative technologies for Sofia Smart City (Sofia Smart City Marketplace) – a partially implemented development of the cluster for the benefit of Sofia within the framework of the OPIC project.
- Social Entrepreneurship Development Model (SEDM) <https://online.fliphtml5.com/khox/exvf/>
- Social Entrepreneurship Trainers' Handbook - <https://online.fliphtml5.com/khox/kqah/>
- Practical guide for social entrepreneurship trainers <https://online.fliphtml5.com/khox/exvf/>
- Design Thinking Tool for Sustainable and Green Entrepreneurship <https://online.fliphtml5.com/khox/omnj/>
- A guide for trainers on digitalization using gamification <https://online.fliphtml5.com/khox/yzxn/#p=1>
- Teacher's Guide for Developing Green Skills During Student Internships <https://online.fliphtml5.com/khox/rlfg/>
- A toolkit for VET teachers on green skills in student internships <https://online.fliphtml5.com/khox/gzti/>
- Roadmap for the Green Transition of the KSGZ <https://online.fliphtml5.com/khox/xhtc/>
- Map of technologies applicable to smart solutions in cities [Project Smart Technologies by Design https://online.fliphtml5.com/khox/ioei/](https://online.fliphtml5.com/khox/ioei/)
- Guide to applying a competency framework in digital transformation <https://online.fliphtml5.com/khox/gwcl/>
- Competency validation tool for professions in smart city management <https://online.fliphtml5.com/khox/yrrm/>
- Smart City Guidance Package (SCGP) – cluster-tested development <https://online.fliphtml5.com/khox/ktcb/>
- Smart Cities Innovation Training Program <https://online.fliphtml5.com/khox/jcnl/>
- Digital toolkit for use in professional training for the media and creative industries <https://online.fliphtml5.com/khox/isgs/>
- Curricula and modules for professional training in the media and creative industries <https://online.fliphtml5.com/khox/ywxc/>
- A guide for entrepreneurs to foster innovation in the face of climate change and the pursuit of sustainable development <https://online.fliphtml5.com/khox/kkub/>
- Guidelines and good practices for entrepreneurs in the fight against climate change <https://fightclimatechange.earth/climate-change-and-sustainable-you-handbook/>

Innovative products and services developed by cluster members:

- Lemi Trafo – innovative transformers for a green transition
- ADD - smart meters and smart control systems
- Valkrea - smart technologies and innovative solutions for building management
- Growyze - SaaS services for cost optimization and waste management
- RISK Electronics – smart solutions for municipal waste management
- Smart Gate – an innovative search engine for goods and services
- Alocor - smart sensors for implementation in building and infrastructure management
- BICA Services – use of drones for monitoring the power grid
- Covid-19 Association - a smart device for monitoring health indicators in the post-Covid situation
- InnobizAcademy – an innovative business model for training companies and attracting investments in the development of company innovations
- Intellect Consulting – integration of AI in digital marketing management
- Kontrax - a modular platform for providing digital cloud services
- CIELA - testing and implementation of new technologies in the automotive industry in partnership with ESPRiT Engineering GmbH on projects for AUDI AG, Porsche AG and BMW Group.

Communication methods and channel used

The established communication channels of the cluster are as follows:

- TOMAS Platform (<https://skcc.tomasdp.com/>) - an internal platform with a database for cluster members and for managing projects, tasks, schedules, clients, activities, events, meetings and CRM. The platform was actively used in the early years of the cluster.
- E-Bit system – intended for internal payments between cluster members based on a register of internal orders and a common measure of activity in value. The system allows for constant monitoring of internal orders between cluster members. The register and the rules for the operation of the system are described in the Internal Regulations of the cluster, which were adopted by the General Assembly. This system was actively used in the first years of the cluster.
- An internal cluster list, through which messages are sent to all members and partners of the cluster, as well as information on the progress of activities or projects. It functions through access of the cluster's operational unit to the Superhosting.bg platform.
- Information on the cluster website www.sofiaknowledgecity.eu. On average, about 100 news, articles and publications are published on the cluster website in Bulgarian and English. According to the website statistics, the average annual number of visits to the cluster website is over 30,000.
- Social networks. The cluster has a profile in the main social networks - LinkedIn, Facebook, X, Instagram, YouTube.