



## D1.5.7 Monitoring Mechanism Proposals

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| Abstract | Mechanisms for monitoring of UIP |
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## LIST OF ABBREVIATIONS

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|        |   |
|--------|---|
| BI     | Business Incubator                                    |
| BSO    | Business Support Office                               |
| CBT    | Capacity Building Trainings                           |
| EU     | European Union  |
| KPI    | Key Performance Indicator                             |
| KTT    | Knowledge and technology Transfer                     |
| PPP    | Private-Public Partnerships                           |
| R&D    | Research and Development                              |
| RC-UIP | Regional Committee for University Innovation Platform |
| STP    | Science and Technology Park                           |
| UBL    | University of Banja Luka                              |
| UIP    | University Innovation Platform                        |
| UKG    | University of Kragujevac                              |
| UM     | University of Montenegro                              |
| UNI    | University  |
| UNS    | University of Novi Sad                                |
| UZ     | University of Zenica                                  |
| WBC    | Western Balkan Countries                              |
| WP     | Work Package  |

## 1. Introduction

The Regional University Innovation Platform (UIP) was developed within WBCInno Tempus project as strategic document in order to support the development and growth of a range of KTT activities including commercialisation of research, collaboration between universities and enterprises, and establishing start-ups and spin-offs.

The UIP includes seven recommended strategic measures, as follows:

1. Assessment and efficiency monitoring of KTT modes
2. Defining of priority research areas of university and capitalizing the knowledge and research potential
3. Commercialization of research results and their transformation to innovation
4. Efficient innovation management supported by a collaborative software platform
5. Development of co-operations between universities and enterprises
6. Encouraging students/researchers to establish start-ups and spin-offs
7. Strengthening university capacity to support the development of Business Incubators and Science Technology Parks.

Based on these, each of the WBC universities (UKG, UNS, UZ, UBL, UM) developed Implementation Plan (as excel tables) with the list of priorities and activities that need to be implemented in order to achieve set goals in the defined timeframe.

[UIP Action Plan for UKG](#)

[UIP Action Plan for UNS](#)

[UIP Action Plan for UBL](#)

[UIP Action Plan for UZ](#)

[UIP Action Plan for UM](#)

Business Support Offices (BSOs) will be in charge of monitoring of the UIP implementation (qualitative and quantitative) and they will use Key Performance Indicators (KPIs) defined in strategic Measure 1 that allow progress monitoring for all seven recommended measures as well as regular activities of BSOs. For that purpose, a table on the following link will be used by BSOs staff, while periods 1 – 4 are actually six-month periods.

<https://wbcinno.datastation.com/#/default/projects/taskview/25>

Also, one of the main monitoring mechanisms are regular meetings of the Regional UIP Committee that will be held at least twice a year. Members of RC-UIP will analyse BSOs reports and above mentioned tables with collected data on progress and suggest actions for next implementation period.

Having in mind that project partners worked on comprehensive analysis of the state at WBC universities and on implementation of some UIP measures within different WPs and activities, it would be useful to have in this document a list of those deliverables that are actually the base for suggested mechanisms for monitoring of UIP.

- Act 2.3 Reinforcement of existing university structures and services (UKG, UNS, UZ, UBL, UM) <https://wbcinno.datastation.com/#/default/projects/taskview/28>
- Act.2.4.2 BSOs' Development Plans (BSOKG, BSONS, BSOZE, BSOETFBL, BSOMNE) <https://wbcinno.datastation.com/#/default/projects/taskview/29>
- Act.2.5.2 Definition of required documents and processes <https://wbcinno.datastation.com/#/default/projects/taskview/781>
- Act 7.1 Development of Sustainability Strategy <https://wbcinno.datastation.com/#/default/projects/taskview/55>

This document provides an overview of the recommended mechanisms for monitoring of the UIP for each Action (main heading) in the UIP Implementation Plan.

## 2. Mechanisms for monitoring of UIP implementation

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### 2.1. Monitoring of efficiency of KTT modes and activities of KTT units through Key Performance Indicators (KPIs) – linked to Action 1 of the Implementation Plan

Within the publication **WBC Regional University Innovation Platform**, a set of metrics for assessment and efficiency monitoring were presented as KPIs. Those were divided into four sets as following:

1. KPIs for investment in knowledge transfer, innovation and research
2. KPIs for knowledge transfer through cooperation
3. KPIs for knowledge transfer through exploitation or commercialization of research results
4. KPIs for knowledge transfer through people.

Based on these, the table Indicators of BSO progress was developed in local languages available on the link <https://wbcinno.datastation.com/#/default/projects/taskview/25>. Here is the list of those KPIs in English:

1. *Collating the data about research and innovation potential of university*
  - *number of research entities published (as a catalogue)*
  - *number of researchers' achievements (types in the online catalogue)*
  - *number of researchers*
  - *number of resources*
2. *Promoting the university research and services using and updating the Catalogue on research and innovation potential of university*
  - *number of promotional events (of different types)*
  - *number of online visitors*
3. *Establishing and maintenance a resource database as HTML catalogue, with on-line browsing and preparing specific reports (at administrator and visitor level)*
  - *recommendation is to provide data validity checking*
  - *email notification sent to project coordinators for data validity checking*
4. *Providing a single-point of access to university resources, equipment, trainings, research findings, patents and licensing offered to business world*
  - *number of services*
  - *number of trainings*
  - *number of trainees*
  - *number of offered patents/licences*
  - *number of registered consultants/trainers in BSO*
5. *Establishing private-public partnerships and promotion of modernized services of university*
  - *number of PPP initiatives*
6. *Developing partnerships with enterprises connecting researchers and students with business partners*
  - *number of scientific papers (with at least one firm representative)*
  - *number of AM/PhD thesis*
  - *number of R&D contracts*
  - *duration of R&D contracts*

- *income from R&D (if available)*
  - *number of companies (no matter the type of cooperation)*
  - *number of students involved in projects with enterprises*
7. *Supporting liaisons with business incubators and science and technological parks*
- *number of joint trainings*
  - *number of (EU) projects or national ones (joint)*
  - *number of incubated business from universities (initiated by UNIs)*
  - *usage of joint resources*
8. *Encouraging students to creative thinking and articulating ideas;*
- *number of students business ideas within Innovation Management Platform*
  - *number of motivational events for students*
  - *number of external lecturers*
  - *number of students competitions*
  - *number of students who participated in trainings for competitions*
  - *number of participants*
9. *Maintenance of innovation management web-platform*
- *number of platform's members (registered)*
  - *indicators within the platform*
10. *Joint market participation with other KTT university units*
- *number of joint activities*
  - *number of organized joint meetings of KTT units*
11. *Participation in improvement of the university regulatory documents and procedures*
- *number of recommended documents and procedures*
  - *number of accepted documents and procedures*

## **2.2. Capacity Building Programme for University staff/researchers/students and BIs/STPs staff – linked to Action 2 of the Implementation Plan**

In order to investigate training needs among the university staff, researchers and students, BSOs staff will initiate the survey using online questionnaires (e.g. <https://www.surveymonkey.com/>) in order to provide the feedback on what kind of training events they need.

Based on survey results, the improving capacity of universities' staff, researchers and students as well as BIs/STPs staff will be realized through numerous activities.

### **A) As part of WBCInno activities, the partners on the project will develop and deliver several trainings:**

Act 3.3 Capacity building trainings of BI and STP staff - developed and delivered by University staff. Two CBT events have already been organized in Belgrade and Banja Luka, and similar event will be organized in Montenegro in February 2015. The core topics include presentations of EU experiences in KTT area and presentations of strategic measures recommended within Regional Development Plan for BIs/STPs in WBC.

Within Act 3.4 Development and delivery of start-up training courses for university students and staff and Act 3.5 Development and delivery of trainings and services to tenants, a series of training events will be organized. They will include modules 4, 5 and 6 for which all BIs

and WBC Universities suggested topics of the training in the document Content of training courses planned within Activity 3.3, Activity 3.4 and Activity 3.5 (<https://wbcinno.datastation.com/#/default/projects/taskview/34>).

Trainings for users of innovation suite (Act4.4) are planned to be held at each WBCInno university. Until now, four training events have been realized at UKG and UNS (<https://wbcinno.datastation.com/#/default/projects/taskview/41>), while other universities will organize trainings in the following period.

Within Act 7.4 Continuous updating and delivery of trainings and services to BI/TP tenants and enterprises, partners have been developing Training and service delivery plan (<https://wbcinno.datastation.com/#/default/projects/taskview/58>) with the list of available trainings and services offered to business institutions, that are mapped at the whole university and presented on online Catalogues (e.g. for University of Kragujevac <http://www.bsokg.kg.ac.rs/index.php?pageview=products>).

Additionally, within activities related to preparing the Competition for best student idea, the whole set of training activities will be developed and delivered. In the document 7.2 Innovation Ideas Competition for Students and university researchers (<https://wbcinno.datastation.com/#/default/projects/taskview/56>), WBC universities will suggest the list of trainings to be delivered to university students/researchers as part of the Competition activities. Particularly, BIs staff will develop and deliver training for Idea Contributors and their team, consisting of four modules:

- Business model development
- Business model validation
- Finance for start-ups
- Elevator pitch.

During the competition, number of participants, number of submitted ideas, number of business plans, success rates, number of trainings, topics covered, etc. will be monitored.

Apart from training events, capacity building will be also realized through Act 2.3 Reinforcement of existing university structures and services. Within this activity, WBC Universities (UKG, UNS, UBL, UZ and UM) have developed the Action Plan (<https://wbcinno.datastation.com/#/default/projects/taskview/28>) for strengthening of existing universities' structures and services in accordance with the UIP and identified needs. Action Plans include sets of concrete activities to be realized by BSOs, whose progress can be monitored through regular reporting of achieved results.

#### B) Training events organized by third parties

Besides the training events that were or will be organized within the WBCInno project, university staff, researchers and students and BIs/STPs are advised to take part in various events and trainings that are organized outside the project. WBCInno project members have already participated in some events (see more in

<http://www.wbc-inno.kg.ac.rs/article/results-20122013/reinforcement-of-university-structures-and-services.html>,

and

<http://www.wbc-inno.kg.ac.rs/article/results-20132014/improvement-of-collaboration-within-triple-helix-framework.html> )



### **2.3. Establishment and development of KTT unit – linked to Action 3 of the Implementation Plan**

Within activity 2.4, five WBC Universities (UKG, UNS, UZ, UBL, UM) have established Business Support Offices as single points of access to university resources. For each BSO, a Development plan (<https://wbcinno.datastation.com/#/default/projects/taskview/29>) was elaborated defining the BSO's goals, scope of activities, KTT progress indicators, target groups as well as the activities that will be realized as a support to the implementation of the Regional UIP.

### **2.4. UIP Collaborative software platform – linked to Action 4 of the Implementation Plan**

Monitoring of the WBC INNO platforms will be carried out using the set of reports embedded in the platform, such as number of users and documents on the platforms, analysis of the trends in using applications, monitoring of ideas (added, reviewed, evaluated, scored, etc.), and many others.

In addition, innovation metrics and reporting tools will be defined within project activity Act4.5.

### **2.5. Motivation of University staff/researchers/students to be involved in KTT activities – linked to Action 5 of the Implementation Plan**

Within the regular WBCInno activities, various events were planned in order to attract more universities' staff, researchers and students and motivate them to be involved in KTT activities. In that sense, ten Info days were planned (five Info days have been already organized at five WBCInno Universities), workshops (three have already been realized), five Open door days (in order to unlock the universities' potential to all interested parties), Final Conference, etc.

During those events, various indicators will be monitored such as number of attendees and statistical data obtained by using the questionnaires.

INNO platforms will be also used to motivate their registered members (professors, researchers, students, BIs staff) to engage in KTT and innovation activities through:

- Posting public announcements
- Forwarding invitations to join thematic groups
- Initiating public ideas of common importance for universities and student organizations
- Promoting and disseminating success stories in KTT
- Following of posted ideas
- Launching campaigns in cooperation with enterprises, based on Open Innovation concept
- Disseminating information on various mobility programmes, competitions, fellowships, calls for projects, etc.
- Online collaboration and exchange of experiences

## **2.6. Mapping, defining priority research areas and promotion – linked to Action 6 of the Implementation Plan**

Initial mapping of innovation potential at five WBC universities was realized in order to identify and collect data on available research infrastructure, research centres, technologies, services, training and other valuable resources. Besides printed version of Catalogues on research and innovation potential of WBC universities, their online versions were also developed.

Online Catalogues were designed in such a way to provide the continuous mapping and include as large number of research entities as possible. This will be achieved through regular updating of five Catalogues and adding new research entities, through distribution of previously developed questionnaires

(<https://wbcinno.datastation.com/#/default/projects/taskview/22>).

Indicators of progress in this area can be easily monitored using online Catalogues, since they already include various reports in their structure:

- number of research entities mapped  
<http://www.bsokg.kg.ac.rs/index.php?tb=entity&page=view&pageview=listentities>
- number of researchers  
<http://www.bsokg.kg.ac.rs/index.php?tb=person&pageview=resources>
- number and type of research resources  
<http://www.bsokg.kg.ac.rs/index.php?tb=equipment&pageview=resources>
- number and type of projects  
<http://www.bsokg.kg.ac.rs/index.php?tb=projects&pageview=projects>
- number of various research achievements, such as laboratory test, patents, prototypes, technologies, products, services, methodologies, etc.  
<http://www.bsokg.kg.ac.rs/index.php?pageview=products>

## **2.7. Development and implementation of clear University KTT policy – linked to Action 7 of the Implementation Plan**

Within Act 2.5 Improvement of the university regulatory documents and procedures, every WBC university has conducted the analysis of the most significant existing regulatory documents that have an impact on the realisation of KTT activities and development of Universities' research and innovation potential. These documents include legislations, procedures, quality assurance requirements, etc. Based on mapped state, each of WBC universities suggested the list of documents that need to be developed in order to further improve this area.

On regular basis (twice a year, preferable) a review of newly introduced or improved documents should be carried out in order to follow the progress in this segment of WBC universities' modernisation process.

## **2.8. Development of cooperation between University and enterprises - linked to Action 8 of the Implementation Plan**

Cooperation between universities and enterprises seems to be somewhat underdeveloped in WBC region, being based on personal contacts between professors/researchers and enterprises and due to the lack of more formalized and systematic approach. In that sense several mechanisms can be recommended in order to strengthen the links between two sectors and improve their cooperation:

- Organisation of various events (Info days, Open door days, etc.) in order to raise awareness on the importance and benefits of such cooperation, as well as to create the culture of collaboration.  
*Monitored through: the number of events, number of participants, feedback from questionnaires, etc.*
- Setting-up of formal and systematic mechanism (procedures, local legislative, etc.) to facilitate this cooperation without additional administrative burden.  
*Monitored through the number of strategic documents, defined procedures, etc.*
- Through regular activities of BSOs, their staff will maintain the contact with enterprises' representatives, link them with research centres, groups, laboratories and experts that can provide them with necessary trainings, offer required services, equipment, expertise, etc. BSOs staff themselves will organize various events (promotional, training and other types of events), which will additionally strengthen the link between academia and business.  
*Monitored through the number of new contacts, number of new cooperations, number of trainings and trainees, number of services delivered to enterprises, etc.*

In addition, following quantitative data will be collected and monitored within KPIs, as defined on page 7 of this document, point 6.

## **2.9. Monitoring and tuning of UIP – linked to Action 9 of the Implementation Plan**

Regional UIP Committees will monitor the UIP implementation based on above mentioned mechanisms and data collected by BSOs, analyse them and suggest recommendations for further UIP implementation as conclusions from regular RC-UIP meetings.