

# **STRATEGIC IP DEVELOPMENT PLAN (Milestone MS6)**

## **TABLE OF CONTENT**

INTRODUCTION.....	2
CONCEPTION OF STRATEGY .....	3
<i>FUNDAMENTAL ELEMENTS OF LIOS IPM STRATEGY.....</i>	3
<i>RESOURCES .....</i>	3
<i>LIOS STRUCTURE.....</i>	5
<i>LIOS IPM PROCESS STRUCTURE .....</i>	6
<i>NEXT STEPS ON PREPARATION OF AN APPLICATION .....</i>	7
<i>IPM MANAGEMENT SOFTWARE.....</i>	7
<i>LIOS OBJECTIVES FOR IPM.....</i>	9
<i>OUR PERFORMANCE IN 2014 YEAR.....</i>	10
CONCLUSION .....	10

## **INTRODUCTION**

### ***ABOUT INNOVABALT FOR LATVIAN INSTITUTE OF ORGANIC SYNTHESIS***

Participation in the InnovaBalt project is important for the Latvian Institute of Organic Synthesis (LIOS) concerning improving multidisciplinary research capacities and strengthening the management of intellectual property and human resources for innovative drug discovery. LIOS is the leading regional research centre for drug discovery, which consists of organic synthesis, medicinal chemistry and the pharmaceutical development of compounds designed for the treatment of cancer, cardiovascular diseases and CNS disorders. LIOS has a clear vision of its mission, which is to develop sustained research activities in the domain of innovative medicine. One of the main objectives within this project is to improve and to develop the intellectual property management (IPM) internal and external processes including expanding constructional IPM system of LIOS.

### ***FIRST STEPS ON IPM STRATEGY***

The strategy begins with the reviewing of information on LIOS existing IPM system, which includes: structure of IPM, connected processes, statistical data on patents with further information evaluation, grouping and analysis. Gaining the maximum understanding on the weak points and setting up the vector for improvements and progress. To determine the objectives group for LIOS IPM system, keeping attention on advantages and points of success. Another aspect of an intellectual property strategy is patent strategy. The process of identifying and addressing potential patent opportunities and challenges begins with an analysis of the competitive patent landscape.

### ***GENERAL LIOS OBJECTIVES FOR IPM IN CONNECTION TO INNOVABALT***

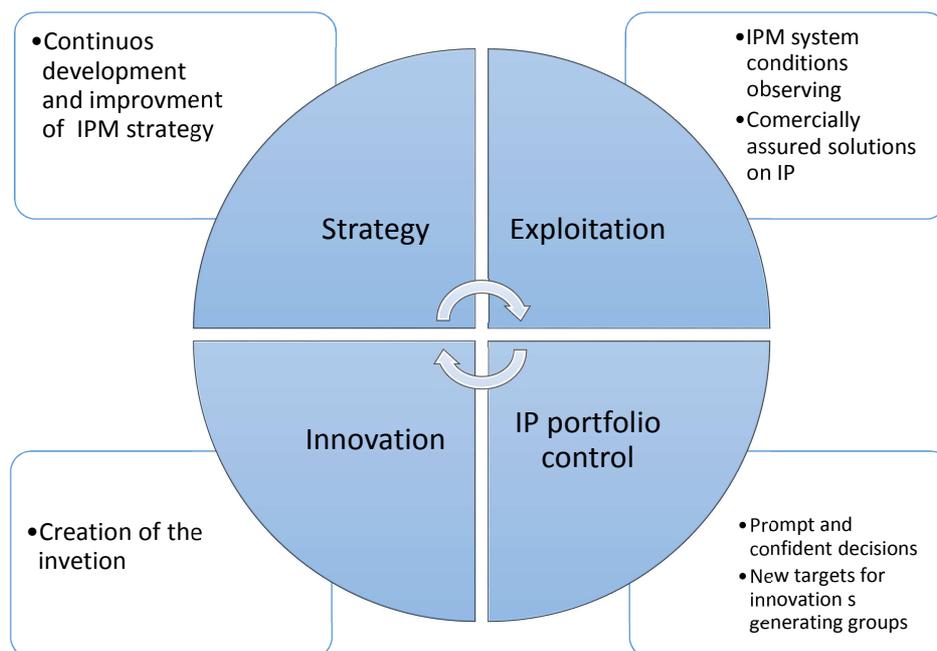
1. To increase the innovation potential at the national, regional and trans/international levels to give contribution to the economic growth in the area of innovative medicine.
2. To improve knowledge of researchers (both early stage and experienced) and stakeholders from the pharmaceutical industry on Intellectual property rights (IPR), their management and technology transfer issues.
3. To strengthen the long-lasting collaboration between LIOS and end-users (industry) to ensure the technology transfer for the innovative drug development targeted to the challenges in health area.

## CONCEPTION OF STRATEGY

### FUNDAMENTAL ELEMENTS OF LIOS IPM STRATEGY

Effective IPM trend includes: resources, processes, previous experience, cooperation possibilities to international partners, objectives, and analytics.

LIOS interaction chain from innovation to IPM strategy and exploitation with full control and optimal resource usage:



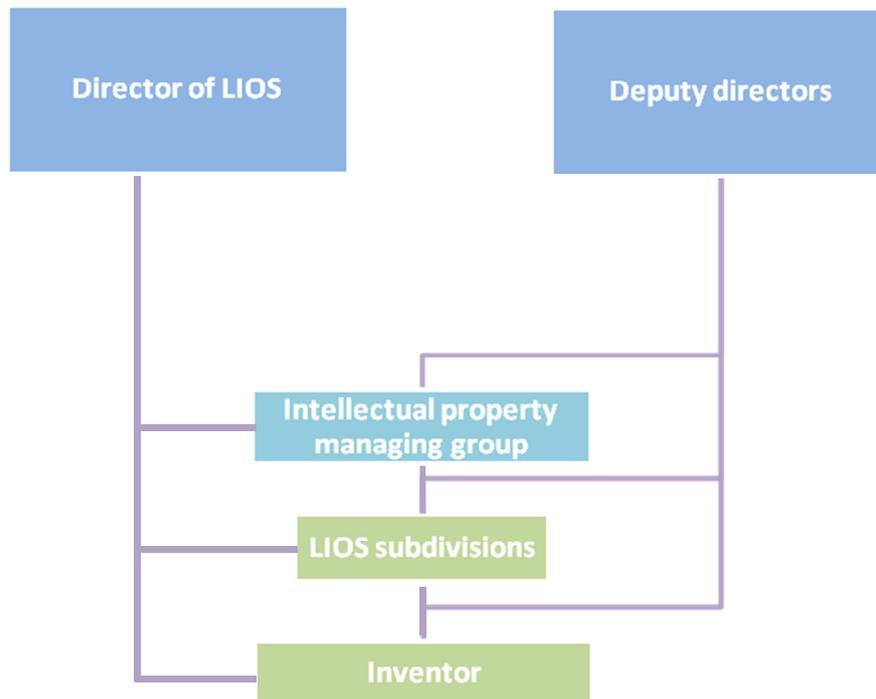
### RESOURCES

Effective usage of resources is the key to successful organization, the following table shortly shows the development trend of our organization. The LIOS subdivisions are based and grouped on scientific research areas which are shown below.

LIOS subdivision	Description
BASAL	Analytical laboratory of biologically active compounds
BASS	Synthesis group of biologically active compounds

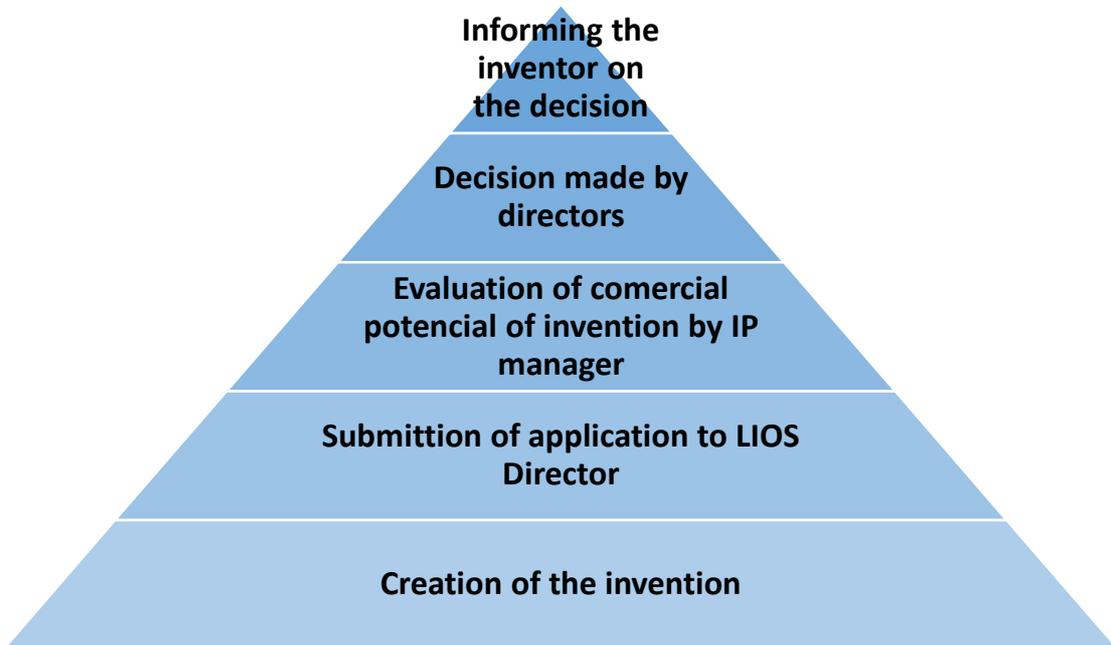
BKG	Group of biochemistry
CNS	Laboratory of central nervous systems active compounds
EKTG	Group of experimental chemotherapy
FFL	Laboratory of pharmaceutical pharmacology
FSMG	Synthesis group of pharmacomodulators
FOKL	Laboratory of physical organic chemistry
HL	Laboratory of chromatography
IDR	Group of IDR
KFSL	Laboratory of carbofunctional compounds
KPG	Group of clinical research
KSG	Group of catalytic synthesis
MASDL	Laboratory of membrane active compounds and b-diketones
MKMG	Group of modern methods of catalysis
MKL	Laboratory of organometallic chemistry
OKL	Laboratory of organic chemistry
OSMG	Group of organic synthesis methodology
OSPTL	Group of organic synthesis promising technology
SMIG	Group of elaboration of synthesis methods

**LIOS STRUCTURE**



IPM processes are based on the scheme as it is shown; in general it is a linear interaction with shared responsibilities on stages between units and departments.

## **LIOS IPM PROCESS STRUCTURE**

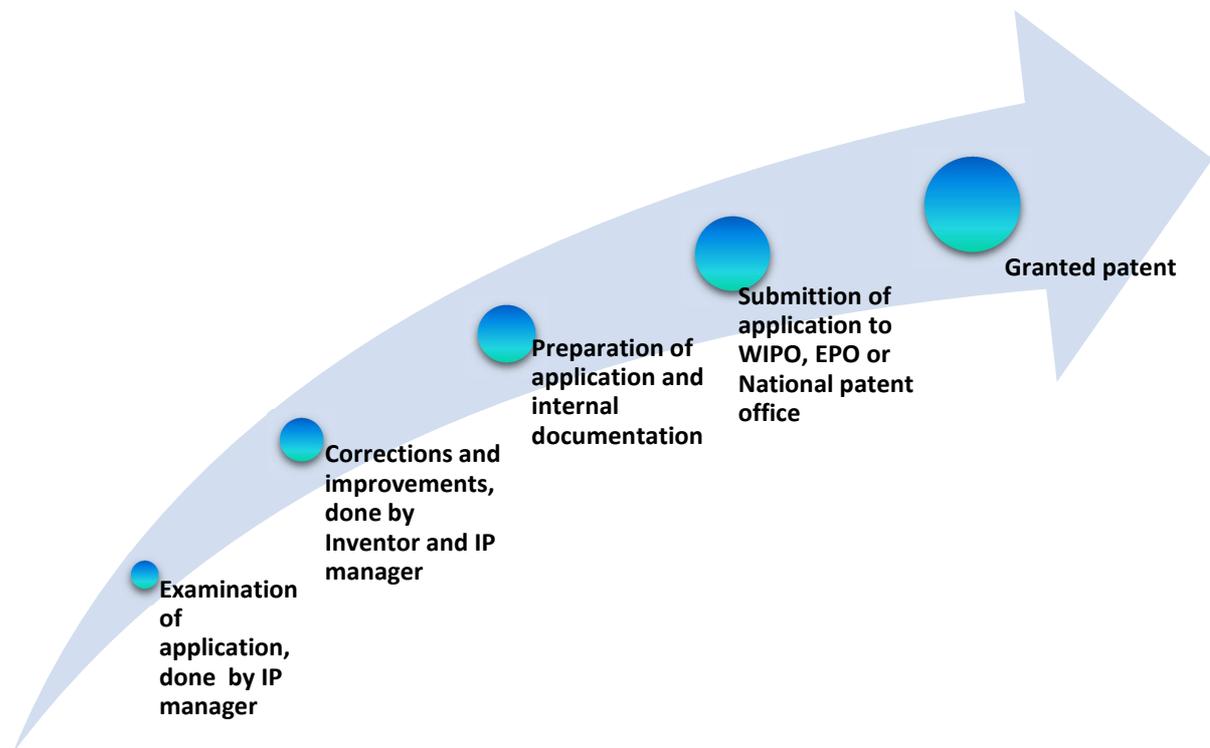


Doing the valuation of the invention IP manager tends the attention on:

- Cost approach, what did it approximately cost to invent and protect?
- Market approach: how much did similar IP sell/license/litigate for?
- Income approach: how much money could IP alone generate if licensed?

During the final steps the directors assume the decision and stationery officer informs the inventor and subdivision on the decision. In case if the invention is considered as valuable, next steps on preparation of an application are taken.

## **NEXT STEPS ON PREPARATION OF AN APPLICATION**



IP manager makes examination of inventor's submitted application; if there are any changes or corrections needed IP manager informs the inventor and in cooperation workout the final version. IP manager also prepares internal documents in frame of this invention. Finally the application is submitted to WIPO, EPO or to National patent Office. If there are any objections from experts, IP manager carries them out and overcome the deficiencies. Final target is to obtain a granted patent.

### **IPM MANAGEMENT SOFTWARE**

One of the strategically significant resources is IPM software. With following general conditions: to integrate the content and workflows of our business processes, sustainably optimize them through automation, and to give more efficient structures.

The software system high grade outcome is ulterior in consecutive and day to day work of IPM personal, by driving in all eligible documentation. First steps in implementation are: system installation and parameters optimization, personal education and further work.

A number of benefits to organization are: software takes care of the work in all existing IP files. Perfect documentation and structure for all IP connected documentation, in a one and integrated system. All information groups and contained files are connected and easily managed.

Apart from the files, all addresses are saved and classified in software central database – an optimal prerequisite of all recognizable processes in an organized manner. Use a software package for LIOS entire IP management and improve our time management through the optimal networking of the individual modules. IPM software is not only a package of separate files it is IP strategic electronic manager.

Economy of the LIOS resources, whereby is possible to replace at least 1 human 8 working hours per day in total 1920 - 3840 human working hours per year. After first IPM software run year it will allow LIOS to save costs at least of 15K EUR per year.

Optimal process control is the indirect profit of successful IP handling. LIOS is going to use WinPAT IPM software as best value for money and as an all-rounder for setting priorities and staying active. WinPAT will manage and monitor our deadline calendar, calculates fees, prepare cost-surveys, and trigger the necessary actions, fills out forms. All of our data entry will be checked against a set of rules for its completeness and accuracy, thus minimizing potential sources of errors. The multi-level security system will protect all of our data. With detailed rights and roles system, for different levels access of LIOS users with capacity and possibility to get to organization IP data. Centralizing all of our data will establish the basis for a uniform level of knowledge for all, even new employees. This will assure our staff independence. With the integrated workflow management we can automate our workflows and standard processes.

### **LIOS OBJECTIVES FOR IPM**

The following objectives will be implemented:

1. Set up of the advanced IT system and database for professional managing intellectual property rights;
2. In 2014 within the framework we are going to do training, educating and skill upgrading for intellectual property manager;
3. Putting in order intellectual property inclusive electronic and printed documentation, creation of a perfect structure. Monitoring and administrating everything concerning due dates, organizing clear storage for all IPM documents via professional software system for managing intellectual property rights;
4. Preparation of documentation for LIOS patent applications covering all subdivisions. Generation of notice form of the invention;
5. Education of LIOS personal on the new IPM system;
6. Improve IPM and increasing innovation by collaboration with and attracted 14 external professionals;
7. Upgrade of the research infrastructure and qualification of human resources at LIOS in IPM to promote the capacity for high-level research on innovative drug development;
8. To improve the LIOS leading and dominating positions on Baltic region market via modernization of IPM system.
9. To create competitive advantage by precluding competitors from making, using, selling the claimed invention for up to 20 years from the priority date. As a result to get a prohibited competitive response based imitation.
10. To ensure the synergy between research on innovative drug development and end-users via LIOS new IPM system to meet the socio-economic needs of the organization.
11. Implementing EPO online filling system and PatXML.
12. Organize an international conference in 2014, IP training event and IPR workshop in cooperation with European IPR Helpdesk;
13. To file patent applications in 2014 – under national procedure 5; under PCT procedure – 3;
14. Patents to be granted in 2014 – 5;
15. Patents to be granted in the next five years – 25.

The implementation of the IPM objectives will reinforce the strategic development of LIOS, improve the scientific outcomes and promote the long-term impact of the LIOS research through its wholesome integration into the European Research Area (ERA).

### ***OUR PERFORMANCE IN 2014 YEAR***

The following targets are reached:

1. IP management software WINPAT is installed and implemented, LIOS personal is educated on the new IPM system and trained to work with it. All files concerning IP are classified and stored in central database;
2. IP manager had listened online training session on IP licensing (speaker Conny Clausen);
3. IP manager has successfully completed the online session of the advanced international certificate course of IP panorama multimedia contents from March 03 to April 30, 2014. (Jointly organized by the KIPO, WIPO, KAIST and KIPA)
4. IP monitoring, administrating and everything concerning due dates, are done in WINPAT system;
5. LIOS patent applications are being prepared according to developed and implemented submission form of the invention.
6. Implemented EPO online filing system and PatXML system for ONLINE patent applications;

### **CONCLUSION**

#### ***GENERAL BENEFITS FROM IPM SYSTEM IMPROVEMENTS***

- Enables more informed decision making by management because of understanding what IP assets organization own. LIOS will have more accurate internal and external information on processes and documents;
- Improved multi level access to patent documents. Optimized working conditions for IPM and concerned persons;
- Enhanced collaboration with partners;
- Recognized staff contribution to IP, promoted culture of innovation, increased staff retention;
- Organized, simplified and secured IP documents storage system;
- Increase of an organization value and competitiveness in Baltic region.