Research & Development Qualification



Hungarian Intellectual Property Office

Raising a good problem, asking a good question

is already half the work.

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Albert Szent-Györgyi

From idea to value

Purpose of the qualification

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Hungary provides several types of subsidies and tax incentives to facilitate R&D activities.



To ensure the unified interpretation of R&D and the proper allocation of R&D funding, the Hungarian Government established a transparent institutional system for R&D qualification.

Since 2012, HIPO has been fulfilling the role (in addition to its IP and copyright-related tasks) of qualifying R&D activities as an independent government agency.



The purpose of the qualification system is to strengthen legal certainty through the use of R&D subsidies and tax benefits.



From idea to value

The R&D qualification **system**



The Hungarian Innovation Act of 2014 provides a uniform definition of R&D, and guarantees that qualifications from HIPO are based on a standard and transparent procedure.

According to the Innovation Act, R&D includes



HIPO may evaluate the R&D content of a project in three types of qualification procedures



In order to increase transparency and provide a reliable source of information about the qualification procedure, HIPO has published a Methodology Guide. The Guide is based on national and international standards and practices, such as the Frascati Manual by OECD.

The Methodology

on the definition of the R&D activity. It also marks off related activities not belonging to research and development, and gives examples to help define the types of R&D. The document also gives a detailed overview of the different procedures, and lists all the important criteria of the qualification procedure.

Teqball® multi-purpose sports device invented by Gábor Borsányi (2014), European patent

Definitions

Research & Development

According to the Hungarian Innovation Act, R&D activities include and experimental development. The Innovation Act provides exact - the definitions are based on the Frascati Manual. In order to have a project qualified as R&D, it should meet the requirements of one of the three types of activities.

Basic research

Experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundation of phenomena and observable facts without any particular application or use in view

Typically at institutions of higher education and research institutes

E.g. cancer research, gene research

Applied research

Planned investigation or critical analysis undertaken in order to acquire new knowledge and expertise for the development of new products, processes or services, or for the considerable development of existing products, processes or services

E.g. investigation of the binding of raw materials during the development of new raw materials, analysis of chemical reactions



Acquisition, summarization, formation and use of existing scientific, technological, commercial and other relevant knowledge and expertise to elaborate new products, processes or services, or to improve existing products, processes or services

E.g. prototype, test run

Not R&D



From idea to value

Factory organization and tooling for production purposes

Patent and licensing process





Tests to verify compliance with standards and regulations

Data collection

Innovation Act § 3(1)

Innovation Act § 3(2)

Innovation Act § 3(7)

Evaluation criteria of the qualification

R&D comprises creative and systematic work undertaken in order to increase the stock of knowledge – including knowledge of humankind, culture and society –, and to devise new applications of available knowledge in order to resolve some scientific or technical uncertainty.

The fundamental criteria of R&D are novelty and scientific/technological uncertainty.

> Scientific or technical uncertainty means the desired knowledge or a solution to a problem is not obvious to a person who has the basic scientific knowledge and technical skills in the relevant field.



During the qualification, HIPO examines the activities based on the description provided in the application. The applicant shall provide a technical and technological description of the project, and shall the scientific knowledge focus on the special features necessary for implementing the the assessment of the of the given field by considering project, the state of the art scientific uncertainty the following topics technology at the time of the at the start of the project, submission of the application which hinders the achievement of the targets δ 6 1N3 16 the desired 10 new scientific outcomes of the project the novelty of the project and the scientific uncertainty to be dispelled

From idea to value

the definition of the new concept, which dispels the scientific uncertainties

content of the qualification

the progress brought about by the new method, compared to existing technologies

the methodology applied during the project

Novel

The intention to create new knowledge is an integral conceptual element of research and development. However, when assessing novelty, HIPO does not perform a novelty search as defined by the Patent Act. The assessment of novelty in the R&D qualification process is categorically separated from the novelty search of the patent process.

HIPO examines the following elements to establish whether the requirement of novelty is met

→ state of the art technology (reference framework to the intended activity)

accessibility to existing knowledge

→ whether the solution to the problem is obvious to a person who has the basic scientific knowledge and technica skills in the related field When determining novelty, global state of the art should be the starting point. Examining the state of the art is the examination of freely accessible information, which has to be performed in detail, as this is the reference point for the desired activity. It is essential to demonstrate how the desired acquisition of novel knowledge means advancement.

Results of the project have to be novel not only for the given company, but it has to be proven that similar solutions haven't been used before in the given industry. At the same time, if there is a need for new solutions and new knowledge in order to adapt an already known and accessible system from another source, then the activity of elaborating and acquiring such solutions and knowledge should be regarded as research and development.

The applicant as a person conducting the R&D activity has to describe the accessible knowledge and the state of the art technology with due diligence.

 \rightarrow \rightarrow The requirement of novelty is to be interpreted differently in each type of R&D. From basic or applied research to experimental development, the novelty requirement rests on gradually different meanings. In the case of basic and applied research, the focus is on obtaining novel knowledge. In the case of experimental development, the qualification rather focuses on assessing whether a solution to a problem is obvious to a person who has the basic scientific knowledge and technical skills in the related field.

Based on creative activity

Ballpoint pen invented by László József Bíró (1938), was protected by dozens of patents worldwide An R&D project has to realize new creative concepts and ideas, which result in the acquisition of new knowledge.



For instance, data processing is a routine activity, therefore, it cannot be considered R&D. However, if this activity is part of a project aimed at developing new methods in data processing, and the activity is necessary to dispel some scientific/ /technological uncertainties, then the activity could fall within the scope of R&D.

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Scientific uncertainty

Scientific or technological uncertainty exists when knowledge is not yet available about



whether
 something
 is scientifically
 possible

→ whether something is technologically feasible

→ how to achieve or measure something in practice There is no scientific or technological uncertainty if the new knowledge to be acquired or the solution to a problem is obvious to a person familiar with the basic scientific knowledge and techniques of the relevant field. This person is someone who has the required expertise (qualifications) and experience in the given field.

Often scientific/technological uncertainty arises if a scientifically/technologically feasible solution has to be adapted into a cost-effective, reliable and reproducible process, material, product or service.

In general, uncertainty in an R&D project may arise with regard to its budget, time frame or feasibility. Furthermore, there might be inherent systemic uncertainty in the scientific and technological uncertainties as well, which stems from the complexity of a system rather than how the individual components behave separately.



A basic feature of R&D is that the exploration of new knowledge and coherent relationships needs a systematic approach. R&D work is carried out systematically if

Systematic activity



→ a scientifically and/or technologically interpretable hypothesis is set up that is supported by literature, which has to be realized by planned and documented collection of information or scheduled experiments



planned and documented experiments and/or modelling are realized in order to dispel a scientific and technological uncertainty and risk



Incandescent lamp filled with cryptone, Imre Bródy (1934)



The description of the R&D process has to be concrete enough, →



 → so that other competent experts could potentially realize the same research.
 The research steps have to be reproducible and transferable based on the research plan and other documentation.



The purpose of R&D is to increase the existing stock of knowledge. In a business environment, however, the results will be protected by secrecy or other means of intellectual property protection. While at universities and research institutes, the codification of knowledge and its dissemination is the main purpose of R&D.

Safety matches, János Irinyi (1836)

└── [†]Photo credit: Dave Herring, Unsplash



From idea to value



R&D qualification procedures

The result of the R&D qualification procedures may be used for taking advantage of state subsidies and/or tax and contribution rebates. Applicants may choose from **three different types of procedures** depending on the criteria and the applicants' needs and purposes.

MaSat-1 The first Hungarian satellite developed and built by students of the Budapest University of Technology. The 1U CubeSat-type satellite was launched into

low Earth orbit on 13 February 2012.

Summary of basic differences between procedures

Timing of

The scope of the procedure

Questions raised by the applicant

Legally binding



_	1.	2.	3.
	Project qualification	Expert	Project group
	 → future project → part of a project 	 → finished project → ongoing project → future project 	→ finished or ongoing projects realized in the given tax year
	 → one project or → part of a project 	 → one project or → part of a project 	→ several projects in a project group
	 → R&D content → the ratio of the R&D activities → whether the R&D activity is carried out within the taxpayer's own scope of activities 	 → R&D content → the ratio of the R&D activities → whether the R&D activity is carried out within the taxpayer's own scope of activities 	 → R&D content → whether the R&D activity is carried out within the taxpayer's own scope of activities
	Yes	No	Yes
	→ anyone who intends to realize an R&D project	 → the tax authority → other authorities, courts → any other third parties 	→ scope of eligible applicants is defined by a Government Decree

From idea to value

1. Project qualification

Anyone who intends to realize an R&D project can initiate a preliminary project qualification at HIPO. In this case, HIPO in its official capacity issues a binding resolution.

The subject of the qualification procedure can only be a fixed term project or part of a project to be started after the submission of the application.



A project is a systematic activity carried out with a given R&D goal, which deals with one scientific problem or a group of scientific problems linked together by one research concept.



Part of a project is a certain unit or series of units, based on which the qualification of the R&D activity is made possible.

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One application may contain one project.





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HIPO qualifies the project with regard to the R&D nature of the project's content according to the respective regulations of the Innovation Act.

Additionally, the applicant may request that HIPO determine the ratio of basic research, applied research and experimental development within the given project, and whether the given activity is carried out "within the taxpayer's own scope of activities" according to the provisions of Act LXXXI of \$\$\$\$\$\$\$\$ 1996 on corporate tax and dividend tax.

Only a project in which the applicant participates may be the subject of a request for certification.

Only one applicant may submit a request for certification, joint applications are not permitted. In the case of a consortium, one of the participants – usually the consortium leader – can submit the request, in which the applicant may present the participants and the activities to be realized by them.

The application can be submitted electronically.

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HIPO's decision regarding the results can be



the project is regarded as R&D in its **entirety**

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the project does not qualify as R&D

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the project can be **partially** regarded as R&D

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If the project is wholly or partially deemed R&D, and the applicant requests the assessment of ratio, or whether the activities are carried out within the taxpayer's own scope of activities, the decision extends to these questions as well. The fee for qualifying the activities of the project amounts to **HUF 83 000**.

If the applicant requests the determination of ratio, the fee increases with an additional **HUF 20 000**.

The fee for the request of assessing whether the activities are carried out within the taxpayer's own scope of activities amounts to an additional **HUF 30 000.** The fees are due on the day of the submission of the application.

The duration of the process is **30 days.**



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Typewriter, the continuously improved machine Farkas Kempelen also made an embossed press in the 1770s, some kind of ancient typewriter, for a blind relative

of Maria Theresa.

l∽∽∣ ' Photo credit: Florian Klauer, Unsplash

2. Expert opinion

HIPO may provide expert opinions on issues such as the qualification of certain research and development activities and whether the costs incurred can fall under the scope of R&D activities.

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An expert opinion is typically requested after a project is realized , but sometimes it happens that applicants ask for the evaluation of ongoing projects, or in some exceptional cases, for the preliminary evaluation of future projects as well.

Expert opinions are legally non-binding.

HIPO investigates the same criteria in expert opinions as in the case of project qualifications. This procedure is also subject to charges, the fee is defined by the Decree on the Remuneration of Judicial Experts. HIPO usually sends a calculation of the fees to the client in advance. The fees usually vary between HUF 90 000-300 000 depending on the question raised and the documents provided.

The duration of the process is dependent on the complexity of the project, but in general, it is not more than 45 days.

An expert opinion can be requested from HIPO by



the tax authority during its audits in relation to the R&D tax incentives





and courts

third parties (companies, research institutions, universities, etc.), which perform R&D activities, and would like to get a kind of guarantee that they are taking advantage of the R&D tax benefits or subsidies rightfully after their realized activities

3. Project group qualification

A project group qualification is a special alternative qualification procedure for large companies, which perform a multitude of R&D projects within a tax year, and would like to utilize the R&D activity-related corporate income tax allowances.



HIPO issues a binding resolution stating that project groups – which contain certain projects realized within a tax year, which are put in the group according to the same criteria – can be regarded as R&D. This means that HIPO's decision will cover not only one project's qualification, but the legal presumption will be extended to all projects realized within a tax year.

The project group qualification assesses finished or ongoing projects realized in the given tax year.

HIPO's resolution can be primarily used for verifying the utilization of tax incentives, but in certain cases. for receiving cash grants as well.

The procedure includes the following compulsory steps

Spatial logic game "Rubik's Cube" invented by Ernő Rubik (1974)

→ 3.1. Registration The applicant shall register at HIPO within the first 60 days of the tax year. The eligibility criteria for registration are

 \rightarrow a minimum of HUF 500 million R&D expenditure in the previous financial year (or a declaration that the amount above will be reached in the year of the project group qualification) qualification)

 \rightarrow a minimum of 50 R&D employees in the preceding financial vear (or a declaration that this number will be reached or exceeded in the year of the project group

 \rightarrow availability of infrastructure that enables the performance of R&D activities (or a declaration that said infrastructure will be acquired in the year of the project group qualification)

→ 3.2. Approval of project groups The applicant shall arrange the projects realized in the given tax year into project groups. Each project can only be part of one group, and the projects must be classified into groups according to the same criteria.

→ 3.3. Sample project selection After HIPO approves the project groups, the applicant shall provide the total list of projects classified into groups (project list per project groups), including the project names and a short summary of the projects. Based on this project list, HIPO will select sample projects for gualification purposes.



→ 3.4. Project group qualification





If all selected projects qualify as R&D, then all projects – which are listed in the project group, but not necessarily investigated in detail

- shall be deemed R&D.
- \rightarrow If it is found that only one project does not qualify as R&D, then HIPO selects another sample project for gualification.
- \rightarrow If HIPO finds that do not qualify

at least two projects as R&D, the whole project group **shall not** be deemed R&D.

Those applicants who applied for support based on an individual government decision (IGD) from the Hungarian Government according





→ The registration request can be done at HIPO at any time during the support period, and no other registration criteria have to be met.

> The group gualification can be requested for the whole grant period, and not only for a single year.

→ The first three steps of the procedure can be contracted into one, so registration, approval of project groups and selection of sample projects can be requested at the same time.

Vitamin C Albert Szent-Györgyi isolated vitamin C in Szeged in the early 1930s Soda Ányos Jedlik (1826)

Other services

HIPO's Intellectual Property (IP) services include IP filing, patent-, trademark-, design registration, patent and trademark search services, IP expert opinions, courses and IP diagnosis.

Thematic research

 \rightarrow Freedom to operate (FTO) search

Novelty search



Patent search services

We are currently offering the following six services

report

Novelty search with preliminary patentability report

Validity search

Gömböc® L_____ invented by Péter Várkonyi and Gábor Domokos

(2007)

Preliminary patentability

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www.sztnh.gov.hu/en/services/patent-search-services

Trademark services

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HIPO intends to help you get the information you need while making trademark-related decisions. Our available trademark services are



Voluntary registration of copyright-protected works

In principle, copyright protection shall belong to the person who created the original work. Voluntary registration of works offers a solution when authorship can be difficult to prove. The right holder can register the work for a registration fee of HUF 5000 (even more in one application).

The procedure can be initiated online.



(in Hungarian)

Expert opinion on **Intellectual Property**

The Body of Experts on Copyright and the Body of Experts on Industrial Property are professionally independent bodies; however, their secretariats are operated by HIPO. Expert opinions are requested in connection with copyright, industrial property and know-how-related issues. In legal disputes, expert opinions are requested by courts or authorities, in extrajudicial procedures by the affected parties.



www.hipo.gov.hu/en/copyrights-and-related-rights/council-of-copyright-experts www.hipo.gov.hu/en/councils-and-boards/body-of-experts-on-industrial-property

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Intellectual Property diagnosis

Free consultancy to promote the intellectual property management of small and medium-sized enterprises.

Conscious intellectual property management is an important element of the innovation process that underpins economic success. Most businesses know this, but they do not have the knowledge and experience to implement it effectively.

The purpose of an intellectual property diagnosis is to resolve this contradiction by providing tailored guidance to businesses on the legal protection of their intellectual property.

An intellectual property diagnosis is recommended for innovative companies that have taken steps in the field of research and development in recent years, and believe that they want to use intellectual property protection more efficiently in the future.

www.sztnh.gov.hu/hu/vallalkozoknak/szellemivagyon-diagnozis (in Hungarian)



Discovery is seeing what everybody else has seen, and thinking what nobody else has thought.

Albert Szent-Györgyi



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└─── Photo credit: Xavi Cabrera, Unsplash

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