

Innovation vouchers

**Tool for removing barriers for cooperation between
R&D and industry**

Jan Jareš, Luboš Nobilis - Ekoport o.s.

June 2012, 1st working summit, Budweis

Innovation Vouchers history



- Innovation voucher (IVS) scheme was introduced in Province of Limburg in Netherlands in 1997 for the first time,
- since then innovation vouchers have been implemented on a national or regional level in many countries.
- *Regional schemes*: North Rhine Westphalia, Bavaria and Baden-Württemberg (Germany), NE-England, Yorkshire & Humber and West Midlands (UK), Flanders and Wallonia (Belgium), Euroregio Middle Benelux, South Moravia (CZ) etc.
- *National schemes*: France, Poland, Macedonia, Greece, Ireland, Denmark, Netherlands, Cyprus, Portugal, Switzerland, Czech republic, Slovakia, Hungary etc. In Austria and Slovenia two different schemes are in place.
- *International schemes*: centrope_tt (CENTROPE – neighbouring regions of Austria, Czech republic, Slovakia and Hungary).

IVS framework

- Aimed at small and medium-sized (**SME**) enterprises
- to **start new, or accelerate innovative activities** and enhance their competitiveness
- in **collaboration with R&D institutions** or other service providers.



IVS typical conditions

The most typical IVS works with the following conditions:

- to support SMEs to purchase services (R&D, IPR, testing, innovation management etc.)
- to be 'lighter' and 'faster' both in application and reporting than standard grant programs; typically open for applications until the exhaustion of funds (no deadline to observe)
- the voucher is issued by a regional/national agency by making a commitment to pay the service provider (occasionally, to reimburse the SME the payment made)
- they are limited in scope and amount committed (maximum 20 000 EUR, most often 3 000 – 5 000 EUR)
- But single IVS vary in design and implementation.....

Typical activities subsidized by IVS

- Product / process / service developer
- Testing and measuring
- Feasibility studies
- Usage of special research facilities
- Prototyping
- Product design
- Business plan for innovative product
- Economic impact assessment
- Market analysis / marketing strategy
- Innovation / technology audit
- New business or management model
- Optimization of internal operational processes



IVS parameters

Financing

- a small, fully financed vouchers (900 – 9 400 €)
- a larger one that requires SME co-financing (most often 50 %)

Addressing

- all IVS address SME, some of them exclude micro-companies (with less than 10 employees), some of them exclude medium-sized enterprises
- some IVS are limited to newcomers in innovation activities
- some IVS may award only one voucher per a company

Sectors

- most of the schemes are open to all sector, some schemes having sector limitation

IVS parameters

International cooperation

- some IVS are open/not open for any kind of international cooperation (also from EU/outside EU)

Application process

- Length of application 1 – 6 pages (typical 4–5 pages)
- Time for approval 5 – 45 days (typical 2-3 weeks)

Selection

- “First come, first served” is a general principle
- Choice by draw loss (CZ)...

Eligible services included to IVS

Research, Development	
11/21*	Generic & applied research
16/21	Proof of concept
19/21	Technical development and testing
Product development	
11/21	Involvement of clients and suppliers in product development
17/21	Design
Technology Transfer & IP	
16/21	Technology 'exploration' (inward TT)
8/21	IP protection
8/21	IP management

Management consulting	
15/21	Innovation management
15/21	Business process engineering
8/21	IT consulting
14/21	Market studies
7/21	e-business establishment
Training	
3/16	Already employed staff
3/16	Newly employed / prospective staff
* Number of schemes (out of 21 or 16 valid responses)	

Source: Availability and Focus on Innovation Voucher Schemes in European Region, Prepared by DG ENTR-Unit D2 "Support for innovation, Brussels, November 2009

Eligible services included to IVS

Scheme Programs	Types of eligible service providers
17/20*	public service providers
19/20	universities
17/20	Public-private labs
13/20	private commercial R&D
7/20	private legal / IPR
6/20	private consultancy

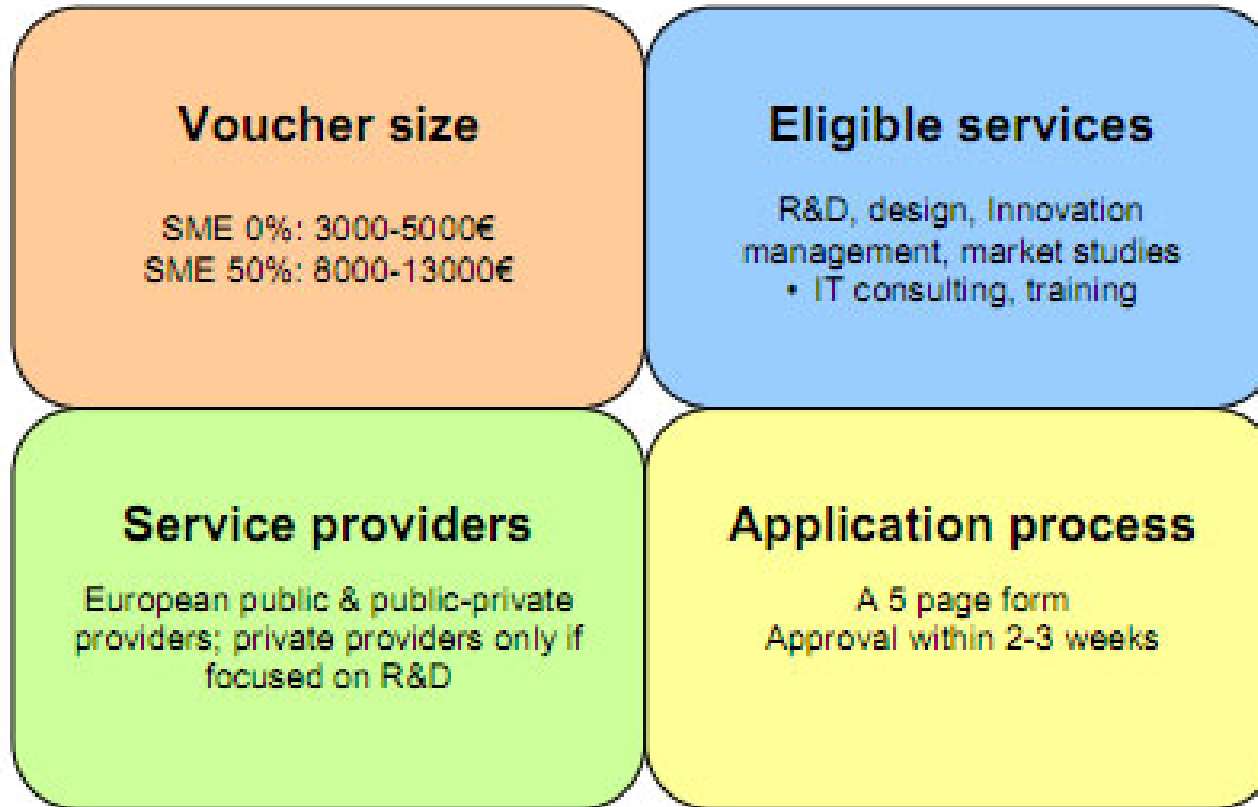
* out of 20 valid responses

Programs	Eligible service provider's origin
3/20	regional only
2/20	regional and national
6/20	national
3/20	neighbouring countries (or parts thereof)
2/20	EU
1/20	all European
3/20	wider

* out of 20 valid responses

Source: *Availability and Focus on Innovation Voucher Schemes in European Region*, Prepared by DG ENTR-Unit D2 "Support for innovation, Brussels, November 2009

Common core of IVS



IT consulting, training may not be included to common core

Risk of IVS

Too generous and open IVS run the risk of misallocating public funds by:

- not generating the expected impact if services are too vaguely described and linked to clear objectives;
- not delivering the expected activities and outcomes with sufficient quality as a result of acceptance of ill-qualified service providers. This might lead to costly conflicts between the SME, service provider and voucher issuing agency;
- fraudulent use of the schemes through complicity of SME and service providers, particularly when other SMEs could act as service providers. The problem aggravates with higher grant sizes.

IVS in the Czech Republic

Regional schemes

- South Moravia Region
- Zlín Region
- Carlsbad Region
- Liberec Region
- Hradec Králové Region
- Moravian-Silesian Region
- Prepared – Olomouc Region



Total 7/14 regions

Regional IVS example – South Moravia

- Founded in 2009
- 75 % financed vouchers, max. 100 000 CZK = 4 000 €)
- For innovative companies from the whole world
- Service providers from Brno city

Last three proposals (2009, 2010, 2011):

- 145 vouchers distributed,
- More then 20 mil. (800 000 €) distributed

Request proceeding

- Applicant choose its service provider
- Applicant and service provider make a contract
- Applicant complete and send an online request

Some outputs– South Moravia



Eco-innovations

- Research in the Field of Composition and Kiln Mode of Glass-Silicate Materials - Maximization of Secondary Waste Material Utilization (tilings from waste TVs monitors)
- Renewable sources of energy at Podolí range
- Testing of bacterial-enzymatic preparations for biogas production optimization
- Developing of AC/DC freq. changer for domestic use of renewable sources of energy

Some others.....

- Laser Detector of Proportion and Shape Deviations
- System Gina Utilization for Pilotless Aircrafts and Helicopters
- Optimization of energetic and enforcement of wheeled and belted tractors

Conclusion – tool ranking

Main outputs / current experience:

- Easy-to-use tool from public administration point of view
- Huge interest from R&D and SME's
- High potential for international transfer
- All target groups (Public, R&D and SME's) benefit from this tool

SBToolCZ

National tool for building quality certification

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June 2012, 1st working summit, Budweis



SBToolCZ



- SBToolCZ is czech national certification tool for design and assessment method for sustainable buildings
- Competitor of international certification tools as BREEAM (UK), LEED (US) or DGNB (DE)
- Founded in 2010
- National platform SBToolCZ consists from 2 certification companies (1 is private, 1 is state enterprise) and Czech Technical University in Prague

SBToolCZ – for whom?

For:

- Developers
- Architects
- Projectants
- Investors
- Other applicants of Sustainable buildings



SBToolCZ – for what?

- **marketing tool** – building quality certification (sustainable principles)
- **evaluation tool** – for measurement of environmental impact including suggestions for optimalization
- **inspiration** – new innovative solutions minimizing environmental impacts
- **technical evaluation** – technical solution
- **social impacts evaluation**
- **economical tool** – lowering the operational costs and improvement of UI
- **evaluation of locality**

SBToolCZ – for what?

Benefits of national certification tool (SBToolCZ)

- SBToolCZ is the only localized tool in CZ,
- the only tool sofar that respects local conditions including climatic, building and legal conditions
- collected data don't leak out of the Czech Republic
- SBToolCZ is based on internationally recognized methodology with focus to similar aspects and factors

Goals of SBToolCZ

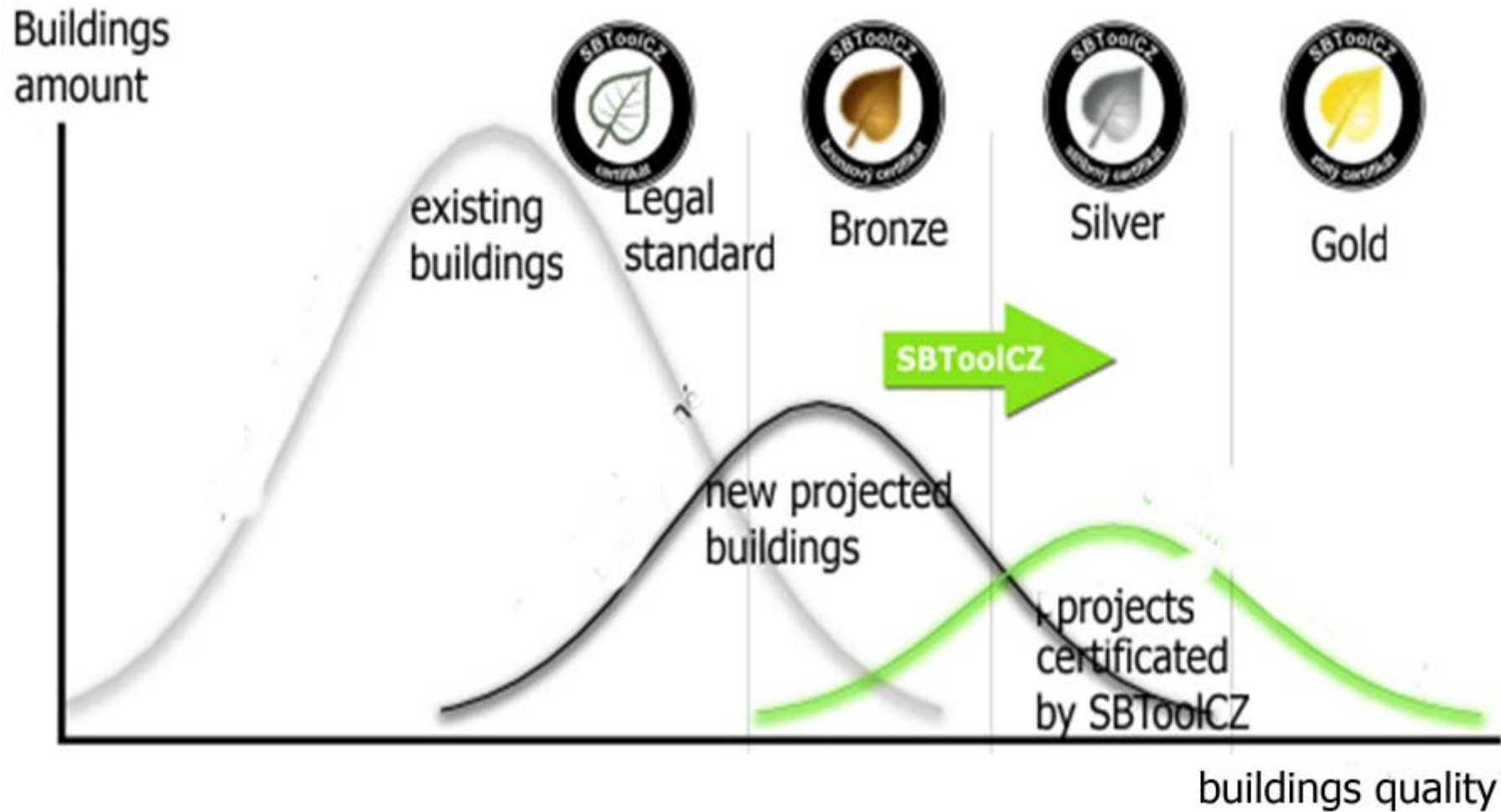
- to provide trustful certification – in compliance with legal and sustainable development conditions
- minimizing environmental impacts within the whole building process
- stimulation of low energy and passive building demand - maximizing market price of the building along with lowering its operational costs
- support to energy efficiency of the building in compliance with EU directive 2010/31/EU on energy efficiency EPBD II
- evaluation of building within the aspects of sustainable development
- to improve internal conditions of the buildings

SBToolCZ – how it works?



- SBToolCZ is a set of criteria related to sustainable development
- each criterion has score scale based on longterm research with respect to national standards and legislative
- multicriterial evaluation of given score based on expert's panel
- = resulted quality level

Impact of SBToolCZ



Types of certificates

- „plain“ certificate (0 - 40% points),
- bronz certificate (40 - 60%),
- silver certificate (60 - 80%),
- gold certificate (above 80%).



SBToolCZ proceeding

- SBToolCZ enables to evaluate the building even from the stage of concept and planning = „**pre-certification**“

Process of pre-certification and certification may have those approaches and procedures (optional):

1. Evaluation in the stage of concept / plan followed by update of pre-certification on the basis of collected data incl. building operation u (3 years)
2. Pre-certification only
3. Standard certification – without pre-certification



SBToolCZ Methodology

- Multicriterial approach
- Range of criteria vary based on type of the building (civil housing (33 criteria), administrative (39), etc.)
- stages of project.

Evaluation areas:

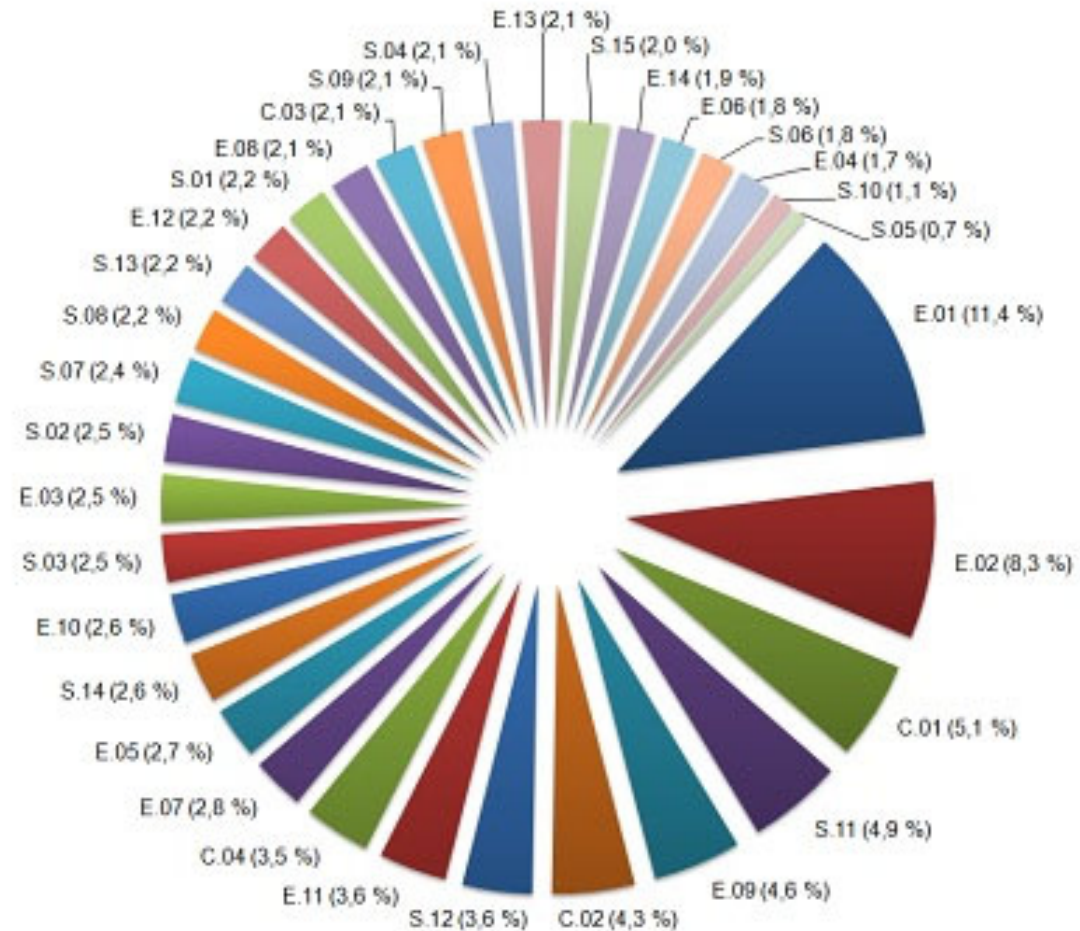
1. environmental
2. social (social – cultural)
3. economical
4. locality (not included in final certification)

Examples of criteria (civil housing)

- Primary energy consumption, drinking water, constructions material used, etc
- Acidification / eutrophication / other environmental impacts or potential
- Rain water utilization, acoustic comfort, heat feel in summer / winter, barrier free access, non-toxicity of buildings materials...
- Services availability, transport acces, etc.
- Building and neighborhood, biodiversity, etc.
-

Criteria relevance

- Each criterion has its own relevance
- Each criterion is being transferred using benchmarks to unified scale value
- Results are being multiplied by relevance





CERTIFIKÁT KVALITY BUDOVY

Pasivní rodinný dům "Na Podvolání"

Místo: Nové Dvory
Frýdek-Místek

Zadavatel: KNAUF INSULATION spol. s r.o.

Hodnocení lokality 4,3

Hodnocení budovy:

	max. 0 / max. 10
Životní prostředí	7,2
Sociální aspekty	7,5
Ekonomika a management	6,7

CELKOVÉ SKÓRE 7,2



RODINNÝ DŮM
HODNOCENÍ VE FÁZI PROJEKTU

Certifikát č.: RD-PR-11-001
Datum: 06. 04. 2011
Vydal: TZÚS Praha, s.p. - certifikační orgán
Prosecká 811/76a, 190 00 Praha 9
pod č. 020-025590

Ozeleněná střecha

Pasivní dřevostavba

Využití dešťové vody

Termický solární systém

CERTIFIKÁT KVALITY BUDOVY

X-LOFT

U Libeňského pivovaru
Praha 8

Zadavatel: X-LOFT s.r.o.

Hodnocení lokality 7,0

Hodnocení budovy:

	max. 0 / max. 10
Životní prostředí	7,1
Sociální aspekty	5,8
Ekonomika a management	5,3

CELKOVÉ SKÓRE 6,3



BYTOVÝ DŮM
HODNOCENÍ VE FÁZI PROJEKTU

Certifikát č.: BD-PR-10-001
Datum: 5. 11. 2010
Vydal: TZÚS Praha, s.p. - certifikační orgán
Prosecká 811/76a, 190 00 Praha 9

Solární kolektory

Využití dešťové vody na zalévání

Rekuperace u vybraných bytů

Výborná dostupnost veřejné dopravy



Certifikát kvality budovy se vztahuje pouze na výše uvedenou budovu. Součástí certifikátu je protokol, který shrnuje provedené hodnocení komplexní kvality budovy a je uložen u certifikačního orgánu a zadavatele certifikace.



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SBToolCZ conclusion

Main outputs / current experience:

- tool for all in the field of construction – biggest contribution for end users
- verified evaluation of environmental and economical impacts on building operation
- support to sustainable building development by competitive approach
- possible optimalization in early stages of the project

Thanks for your attention!



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