



Generating, protecting and commercialising Intellectual Property Rights

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JASPERS Networking Platform

Second Extreme Light Infrastructure (ELI) pillars workshop

The benefits of science-business collaboration

Direct

Indirect



Impact

- Social
- Economic
- Cultural

Academia

Better informed scientists
Financial benefits
Higher employability

More research funding
Higher research ranking
Better research facilities

Business

Better returns
Higher productivity
Better differentiation

Improved strategic focus
Increased market share
Better company profile

What is IP and IPR

Intellectual Property (IP) is a form of "intangible asset"

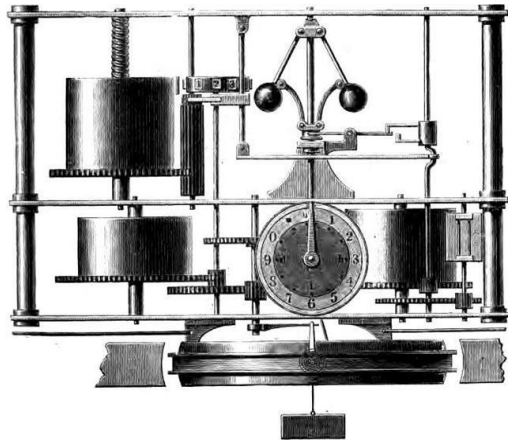
which relates to creations of the human mind

Intellectual Property Rights (IPR) are legal rights granted to creators of IP to give them protection over their intangible assets

IPR grants you the ownership of your creation. If you own it, then you can use it!

IP offers a myriad of options: exploiting, licensing, cross-licensing , attract investment etc.

Examples of IP



Bain type-printing telegraph 1841

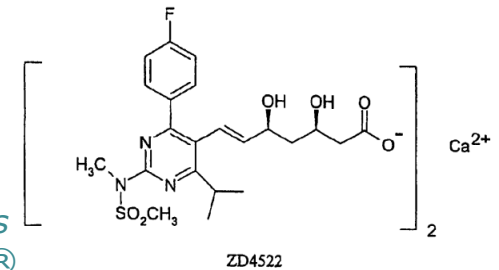
Leffe®



Apple® iPhone®



Astra
Zeneca's
Crestor®



IP	Industrial Property	Inventions	Patents	Trade Secrets
			Utility Models	
			Plant varieties	
			Topographies of semiconductor products	
	Distinctive Signs	Trade marks		
		Trade names		
		Geographical Indications		
	Aesthetic creations	Designs (industrial design)		
	Other Intellectual Property	Literary & artistic creations	Copyright	

What is Technology Transfer

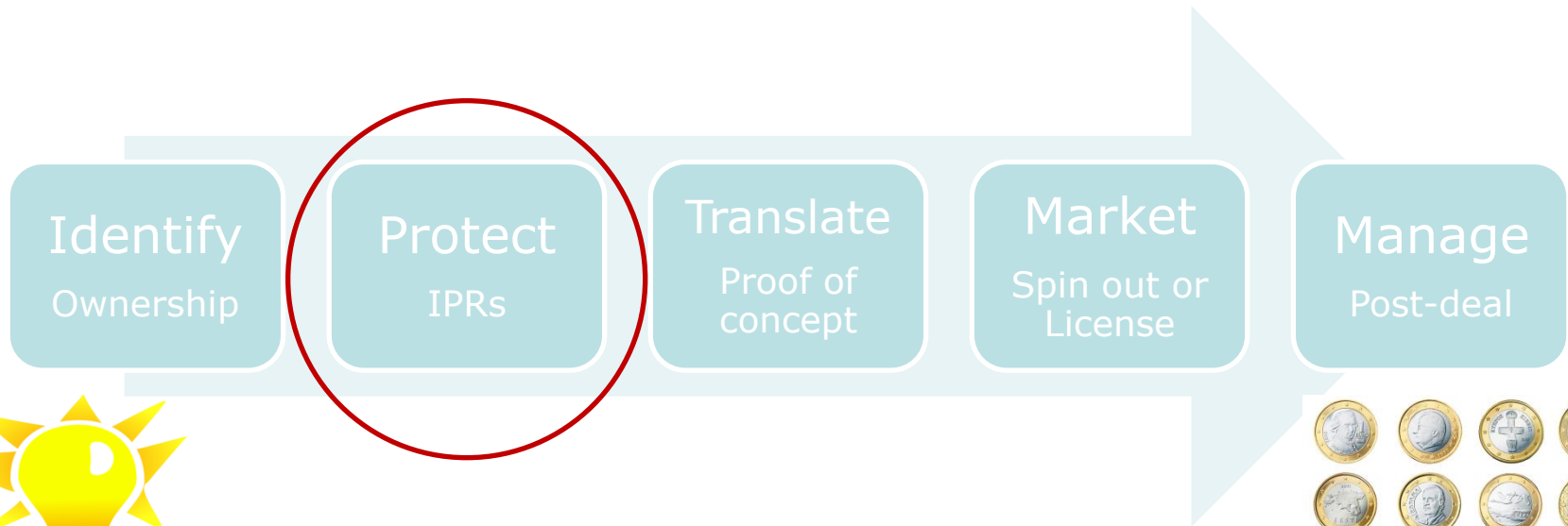


Research



Product

Technology Transfer Process



IDEAS



IMPACT

Practical Solutions

- *Increase openness and dialogue*
- *Engage earlier than later*
- *Utilise infrastructure that connects business with science (macro-regional)*
- *Improve management of expectations*
- *Incentives for increased collaboration*
- *Policy making to deal with the novel uses of data*
- ***Foster entre(intra)preneurship culture***



Best Practices for the set-up and management of Science and Technology Parks

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EU STPs

- EU STP activity in EU increase over last 11-12 years
- Today 366 STPs in EU managing about 28 million m² of floor space
- 40,000 organisations employing approximately 750,000 people - high value added jobs.
- 2000 – 2012 total capital investment into EU's STPs has been circa €11.7 billion
- ERDF capital investment on buildings for EU STPs €5.6 billion

EU STPs Cont.d

- STPs have expended circa €3 billion on support and innovation services to assist their tenants and proximate knowledge based businesses
- STPs are not simply the landlords of attractive and well specified office style buildings
- They are complex organisations, often with multiple owners having objectives of economic development public policy and imperatives to be financially self-sustaining in the long-term.

Key differentiators of STPs versus normal business parks

- Operate careful tenant selection policies
- Prioritise newer knowledge-based technology industries
- Engage with local knowledge base (primarily universities and public research organisations)
- Engage cooperatively with other public and private sector actors
- Own and/or operate one or more business incubation schemes
- Provide professional business support and innovation services to support tenants and drive development of local innovation eco-system.

Emerging STP model

- Part of the local ecosystem: design and deliver programmes that accelerate and support innovation ecosystems
- Balance short-term financial returns for sustainability against need to accelerate innovation
- Public sector STP involvement comes in the form of patient capital (subsidies and grants) leaving room for the STP to attain financial viability
- Private sector investment and involvement is important to prove STPs can attract inward investment (national and international)
- Where local innovation eco-system is highly developed private sector may well take the initiative alone in creating an STP

Key success factors for STPs

- Good strategy and objectives of the new park and decide on the best model for implementation
- Complex processes, diverse relationships STPs must be able to understand this agenda and manage it well
- Engage the knowledge base – active, effective and multi-dimensional relationship with a university or PRO is often crucial. Research partner should have a strong KTT mandate
- Managed interaction with public sector at local/regional, national and European level – not stand-alone organisations
- Securing the land, capital and revenue to establish and maintain STP is critical - don't lose sight of the objective to stimulates innovation and knowledge-based business growth

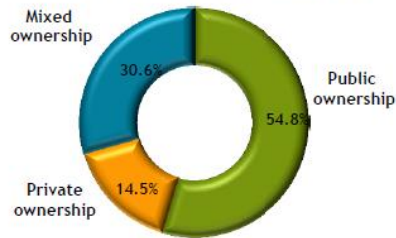
Key success factors for STPs Cont.d

- Proper appraisal of local skills base – address weaknesses in entrepreneurship levels or technology-SME management skills
- Proper appraisal of regional and national markets or corporate supply chains – the weaker these are the greater the need to increase demand through support services
- Proper tailoring of service offering to local conditions
- Choice of science park model – most STPs have an objective of eventual financial sustainability. Can be achieved also with support of subsidies
- Strong leadership team assembled with a board with good connection to the local economy (private and public)
- CEO with appropriate sector experience and strong leadership and management skills

The key Choices

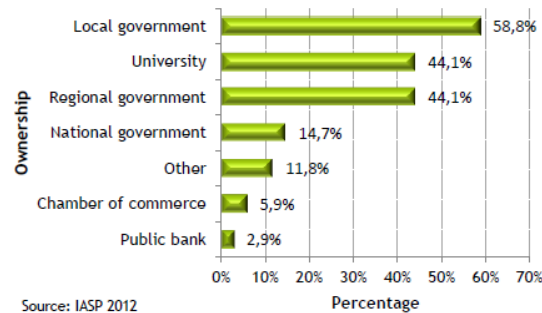
Ownership structure (Public, Private, mixed)

Figure 3.2a Ownership of EU STPs



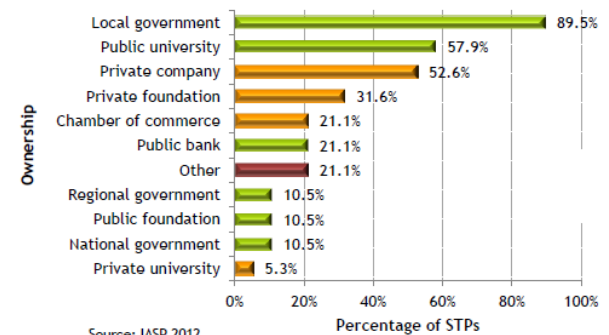
Source: IASP

Fig 3.2b Public ownership of EU STPs



Source: IASP 2012

Figure 3.2c Mixed ownership of EU STPs



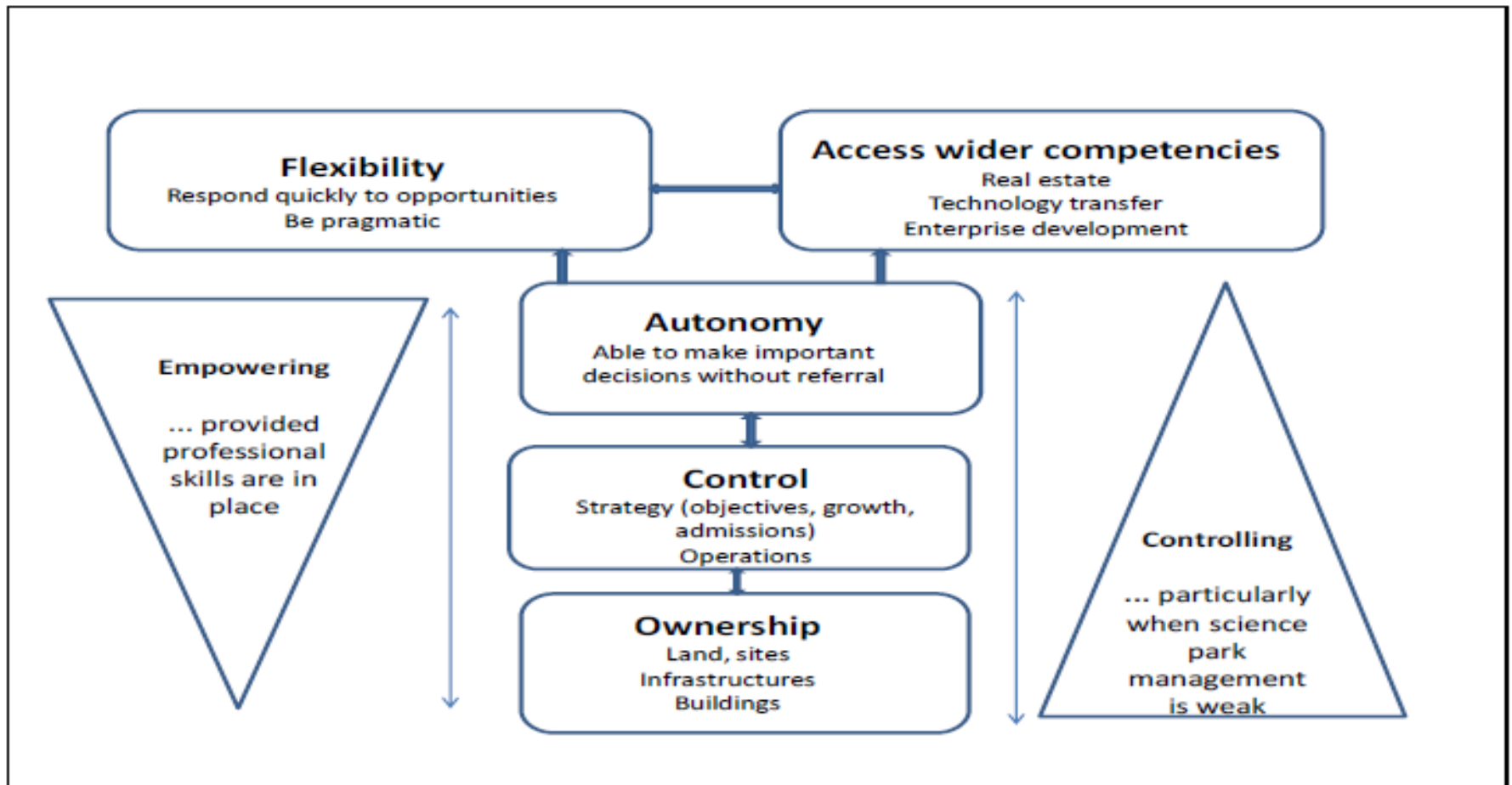
Source: IASP 2012

Key choices cont.d

- Sectorally specialised Vs General
- Land (ownership Vs Lease/concession)
- Involvement of the local eco-system (government, academia, private sector)
- As many models as there are parks

Example	Lead partner (s)	Supporting partners	Management
Technologiepark Heidelberg GmbH (Germany)	City of Heidelberg Chamber of Industry and Commerce Rhein Neckar	University of Heidelberg and a number of research institutes, particularly in the sphere of medical research and life sciences	Management company: Technologiepark Heidelberg GmbH; Owner of the buildings: PPHD II GmbH and Co KG, owned 100% by Sparkasse Heidelberg Lettings: RN Immobilienmanagement GmbH Rhein-Neckar
Loughborough Science and Enterprise Park (United Kingdom)	Loughborough University	Charnwood Borough Council Leicestershire County Council	Currently managed as a division of the University; new management company likely to be set up soon to manage expansion of the park
Ideon Science Park (Sweden)	Lund University	The City of Lund Wihlborgs a property developer that is the majority shareholder of Ideon AB	Managed by Ideon AB, an independent company owned by the partners. Governance is through a Board with shareholders, the CEO and an independent chairman
22@Barcelona	Barcelona City Council	UPF, UB, UPC, BDigital Foundation, Barcelona Media Foundation, BTech, BCD.	Barcelona Activa + 22@Network

Key governance issues



Risks for public sector involvement

- **START SMALL!**
- Usually modest at the STP formation stage if comprehensive feasibility study is conducted before any substantial investment is committed
- This should ensure that initial investment is proportionate to the risks identified through the feasibility study

Next stage of development is the most risky

- Feasibility no longer relevant and too soon to expect evaluation techniques to be useful
- STP not financially sustainable
- Scale will be small - little resilience if economic environment adverse

Next stage of development is the most risky

- At this stage public sector should consider:
- Confirmation that STP is securing demand of an appropriate quality at a rate that justifies expansion
- Confirmation that STPs revenue projects are delivering
- Evidence that STP is integrating with other local players
- Evidence that STP is on track to deliver business plan objectives
- Evidence that management are performing well (confidence and support of backers and customers)

The next stage

- At between five and ten years STP should have track record
- Time to moderate public sector investment in favour of private funding ?
- If private sector has no appetite possible increase of public sector investment

- This needs to be evaluated carefully:
- Outputs generated by the STP per € of public sector expenditure
- Contribution to innovation eco-system
- Effectiveness of governance structure and management i.e. efficiency and effectiveness
- Finances and financial structure of the STP to determine its sustainability
- Comparative performance analyses with other STPs based in similar economic and innovation ecosystem environments



Our report



JRC Support

- IP and TT related advice, support and access to best practices
- Support and advice in STP conception and planning
- Connections to strong network of international practitioners (IASP, Grenoble, Trieste, CERN, Etc.)



For info or further questions on this seminar and the activities of the JASPERS Networking Platform, please contact:

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