TTN – WP3 Methods for measuring TT activities

CERN, Meeting 17/06/08

Outline

- TTN WP3 Hamburg meeting
- KPI's 2 lists to merge (*work in progress*)
- WP3 schedule next steps

TTN WP3 meeting – 13/05/2008, Hamburg

Attendees

- **DESY (DE):** Katharina Henjes-Kunst, Karsten Wurr
- CNRS/IN2P3 (FR): Marcel Soberman, Pascal Dargent
- EPFL (CH): Gabriel Clerc
- CERN (CH): Jean-Marie Le Goff, Emir Sirage

Outcome

- Focus on Astrophysics, Nuclear & Particle Physics research community
- Preliminary examination of European and US questionnaires (ASTP, AUTM, Proton, SwiTT, EIROforum surveys)
- Proposition to focus on three matters to define KPI's, in a first phase:
 - IP management; Collaborative & Contract Research (incl. S&C); Enterprise creation
- Definition of WP3 schedule next steps

Questionnaire comparison – work in progress (1/2)

Headlines	TTTF delverable	ASTP	SWITT	AUTM	PROTON	TT_EIFORUM
		Association of European Science and Technology	SwissTechnology	Association	Proton	EIRO Forum
		Transfer Professionals - 2006	Transfer	of University	European	
			association	Technology	survey - 2005	
			Survey 2006	Managers	(EC project)	
				(US) - 2006	(- 1 - 7 7	
evel of maturity of an IS						
	Existence of an IP and industrial relationship charter (with sublevels)					
	Existence of a KTO	Is your office responsible for some or all of the				
		patenting, licensing, or other knowledge transfer				
		activities of the following institutions				
		How many employees				
		now many employees				
		Who has first rights to the intellectual property rights				
		created at your institution (government, institutions,				
		Which of the following knowledge transfer services				
		are provided by your office?				
	Assessing and sharing IP profits with inventors and research units				l	
	Staff incentive policy					
	Capability of protecting IP against legal attacks					
	Existence of IP-TT reviews for each project					
p management						
	# of patents in stock, age and status	How many nvention disclosures and patenting this year?				
	# priority patents, licensed patents (= active patents) and corresponding	How many new patent applications (priority filings)				
	direct income and royalties (cumulative and per year)	did you file for your institution?				
		How many technically unique patents were granted to your institution?				
		How many USPTO patents were granted to your			 	
		institution?				
	# patent selling and corresponding income	How many licenses (include assignments) or option				
		agreements were made between your institution				
		and companies?				
	# licenses (patents, software, know how) and corresponding income	What was the total amount of license income				
	# incenses (patents, sortware, know now) and corresponding income					
		earned by your institution from its intellectual				
		property (patents, software, material transfer				
		agreements, confidentiality agreements, etc)?				
		Approximately what percentage of this license income was from patents?				
		Approximately what percentage of your institution's			l	
		active patent portfolio has ever been licensed?				

Questionnaire comparison – work in progress (2/2)

Category	IN2P3 proposal for TTTF	ASTP	SVITT	AUTM	PROTON	TT_EIFORUM
Research contracts						
	# CR (collaborative research) conventions with correct IPR contents,	How many research and development agreements				
	corresponding public and private funds	were made between your institution and companies?				
	companies successful in PP RFP (calls) after CR or using MS licenses -					
	by analysis of RFP results-					
	derivative products (how to do: applications of basic research, large					
	scale sales, other products?)					
	subcontracting (?)					
	if exists, IP and commercial income resulting from these CR					
Enterprise creation				+		
	# creations per year in PP domain and in other domains	How many start-ups were formed in 2006?				
	How many of your licenses and option agreements were granted to How	How many of your licenses and option agreements				
	many of these licenses and option agreements were granted to Start-ups	were granted to How many of these licenses and				
		option agreements were granted to Start-ups				
	turnover					
	cumulative # new jobs creation					
	innovation or start-ups coaching networks (?)					
Comiese						
Services	# of conventions and corresponding amount for each category:					
	Consulting, studies, expertises					
	Beam hours					
	Dosimetry					
Industry funding						
	Industry funding (foundations, conventions sponsoring)	Approximately what percentage of your institution's				
		total research expenditures was funded by private				
		companies?				
	National funding dedicated for PP academic and industry joint actions					
		l				

List 1 – work in progress (1/3)

Suggested KPI's - defined scope (IP Management, Collaborative & Contract Research and Enterprise creation)

• For all KPI's, the idea is to do an assessment during the period from [2007 until date];

IP MANAGEMENT						
TT Perspective	Suggested Key Performance Indicator	Rationale				
P1–Identification and protection of Intellectual Property arising from Astrophysics, Nuclear & Particle Physics research groups.	 KPI-1: Number of Invention disclosures KPI-2: Number of new technologies assessed for protection KPI-3: Number of new IP protected¹ KPI-4: Number of High-Risk IP protected 	Measures the number of new technologies potentially subject to future transfer and the efforts done to protect IP in the Physics field. Measures the High-Risk IP decisions with the only objective of recognizing the ownership, inventiveness, novelty and strong publication of core fundamental research from the Physics field.				
COLLABORATIVE & CONTRACT RESEARCH (INCLUDING SERVICES/CONSULTANCY)						
P2 – Promotion and fostering of collaborative & contract research with financial participation of European industry and <u>Institutes&Universities</u> to Astrophysics, Nuclear & Particle Physics research groups.		Measures the collaboration activity and the investment done by the European industry and Institutes&Universities for projects in the Physics field.				

¹ Including Patent applications, Trade Marks, copyrights

List 1 – work in progress (2/3)

TT Perspective	Suggested Key Performance Indicator	Rationale
P3.→Identification.of.commercial.potential.in. technologies.arising.from.Astrophysics,.Nuclear. &.Particle.Physics.research.groups¤	<pre>KPI-8: Number of market assessments¶ performed;¶ KPI-9: Number of license deals closed (R&D,¶ exclusive, non-exclusive, options);¶ KPI-10: Licenses related income with:¶ • → associated patent & know how services/consulting;¶ • → just associated know how services/consulting;¶ KPI-11: Number of collaborative & contract research with European industry (includes Switzerland & Turkey) and Institutes&Universities.¶ ¶ KPI-12: Number of collaborative & contract research outside European industry and</pre>	Measures the positive correlation between market assessments and successful transfer.¶ ¶ ¶ Indicates the number of successful agreements and hence the volume of successful TT¶ ¶ Indicates the TT inter-relation in and outside Europe within the TT. Network members. A

List 1 – work in progress (3/3)

TT Perspective	Suggested Key Performance Indicator	Rationale				
ENTERPRISE·CREATION						
P4· → Start-up· creation· arising· from· Astrophysics,· Nuclear·&·Particle·Physics·research·groups.¤	KPI-13: Number and types of start-ups; ¶ ¶ KPI-14: Number and types of products/services in the market; ¶ (TT-Network members must classify the meaning of products/services) ¶ ¶ ¶ KPI-15: Size of the start-up ("financial size") and the number of employees; ¶	Indicates the results of entrepreneurship success resulting from the Physics field. ¶ ¶ Indicates the successful benefits of Physics research and entrepreneurial activities to the society (B2B and B2C) ¶ ¶ Indicates the start-ups growth scenario and indirectly indicates how many jobs are being created. X				

WP3 schedule - next steps

17th June, 2008

- Following actions:
 - Metrics/KPIndicators identification, presentation
 - Questionnaire headlines

30th October, 2008

• Metrics/KPIndicators & Questionnaire validation will be done at Workshop with the participation of all TT network members

March, 2009

• **Survey all PROs** participating into a Particle/Astro/Nuclear Physics programme (list provided by TT network contacts)

December, 2009

• Evaluation of survey results & final report