



Project no. 018340

Project acronym: EDIT

Project title: Toward the European Distributed Institute of Taxonomy

Instrument: Network of Excellence

Thematic Priority: Sub-Priority 1.1.6.3: "Global Change and Ecosystems"

D15 Interim report : Elements for Research Policy - new strategies for Taxonomy

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[draft 1]

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Dissemination Level		
PU	Public	
PP	Restricted to other programme participants (including the Commission Services)	X
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

EDIT research strategy/policy development – EDIT science policy group

Introduction

The first mission of EDIT's Science Policy Group is to establish a map of the policy issues that member institutions may want to face together. This is necessary for any sort of long-term integration of European taxonomic institutions: it informs decisions, guides process, and justifies the actions taken. The Science Policy Group serves as the policy experts board for EDIT, to provide information and identify possible choices, which will then be acted upon by the Board of Directors or its working groups.

Unfortunately, delay in the work programme of the SPG prevented delivery of a complete report in PAR 3. However, a certain number of elements were explored over the third year of activity of EDIT and are summarised below.

Rationale

Policy is developed on a strategic and pragmatic basis. It follows a decision flow along the following questions:

- What do we want to achieve?
- What policy/planning/resources do we need to get there?
- What are the consequences of such decisions?

The first meeting of the SPG demonstrated that there is little point in standardisation for governance. Enforcing standards for standards' sake risk eliminating precious resources and expertise. What is needed is appropriate harmonisation to ensure effective and efficient collaboration

A preliminary question raised was to determine whether the group should explore policies or metapolicies, that is, policies about how to develop policies. Terms are currently being used in a relatively loose sense.

We are looking at policies in the following senses:

- An intent to deploy existing mechanisms or resources in a particular harmonised way to effect an agreed action
- In a regulatory sense (for collections and data in particular) to mean conformity using the same definitions, standards and so forth. Probably not extending to governance.
- As a statement of principle or values that informs or reflects agreement on separate actions.

Other definitions will doubtless emerge in the course of the work of the group.

Duration

The function of the group is to propose a strategy for the remainder of the EDIT contract and leading into the following five years, thus contributing to the building of a durable, integrated infrastructure of taxonomic resources within the European Research Area.

The group doesn't work in a vacuum but fits within a wider EDIT strategy, coming from the former Joint Programmes of Activity, as detailed in EDIT's Periodic Activity Report. Notably, the expertise and information provided by the Science Policy Group will inform the decisions taken by the Board of Directors..

Goals and themes:

- Emergence from the structure of EDIT's Work Packages – decisions need to reference to specific strategic goals instead.
- Development based on the EDIT vision for the 21st century document
- Developed with reference to specific needs integrated with the requirements of various European agencies and Biodiversity research resources.

Strategic Goals, Actions and policy needs

Strategic theme	Goal	Actions	Policy need – is it being covered already in EDIT? Or SYNTHESYS?	origin
The focus/drivers of research				
Underpinning the tree of life	Taxonomy in defining the mode and tempo of evolutionary change	Defining research strategy and priorities	Status of the proposal of ToL project to FP7 from CETAF with the support of EDIT (WP3)?	EDIT 21 – what will taxonomy look like as a subject? Para 1.
Understanding the biodiversity of the micro world	Ecosystem approach/ metagenomics	Defining research strategy and priorities Molecular tools? Conceptual models	Priority for research grants of WP2 in JPA4?	EDIT 21 – what will taxonomy look like as a subject? Para 2. Para 7.
Impact of environmental change on biodiversity	taxonomic outputs into forecasting and modelling integrating knowledge of natural ecosystems with human systems and social impacts	Defining research strategy and priorities – with complementary groups and organisations Staff loans and secondments	Creation of an ATBI demand with case studies (see D1+D2, 3.2). Define task forces for inventories (see D1+D2, 3.2).	EDIT 21 – what will taxonomy look like as a subject? Para 3.
Research Infrastructure				
Speed taxonomy	A new scale of taxonomy, increasing generation of taxonomic information	Changing taxonomic concepts. Priorities for massive “industrial” sequencing and supporting infrastructure.	Support the creation of shared infrastructures for extraction and DNA processing (see D1+D2, 5.3.3).	EDIT 21 – what will taxonomy look like as a subject? Para 8.
		Access to cheap, fast, high-throughput DNA sequencing	Support the creation of shared infrastructures for extraction and DNA processing (see D1+D2, 5.3.3).	EDIT 21 – What facilities will we use? Para 1.
taxonomy as web-based information science	information clearing-house virtual location for analysis and collaboration	Web-based Tool development Data location Data quality and cleaning	Scratchpads (see D1+D2, 4.2).	EDIT 21 – what will taxonomy look like as a subject? Para 4.
	Moving taxonomies and publications to the web	Taxonomic outputs online	Scratchpads (see D1+D2, 4.2). 1 st Workshop on Taxonomic Publications (WP4, Dec 08).	EDIT 21 – What facilities will we use? Para 4., para. 8.
Biodiversity Informatics	Robust and sustainable data infrastructure	Maintaining adequate storage and computation capacity	Creation of ISTC (see D1+D2, 4.1). Use of CDM (see D1+D2, 4.2).	EDIT 21 – What facilities will we use? Para 2.

	Open access			EDIT 21 – What facilities will we use? Para 2.
	Transformation of heritage data		Internet Platform for Cybertaxonomy (see D1+D2, 4.2 and 5.2).	EDIT 21 – What facilities will we use? Para 2.
	Standardised ontologies	Getting rid of jargon, for a start	Use of CDM (see D1+D2, 4.2).	EDIT 21 – What facilities will we use? Para 2.
	Unique data identifiers			EDIT 21 – What facilities will we use? Para 3.
Collections	access and management for research		Directors of Collections Committee (see D1+D2, 4.3.1)	SYNTHESESYS?
Collections development	New collections for research	tissue, DNA – rationale and priorities	SYNTHESESYS (Network Activity-E). SYNTHESESYS 2?	EDIT 21 – what will taxonomy look like as a subject? Para 5.
		tissue, DNA – new storage facilities	SYNTHESESYS (Network Activity-E). SYNTHESESYS 2?	EDIT 21 – What facilities will we use? Para 6.
	New specimen concepts	digital images, bioacoustic data and molecular sequences		EDIT 21 – what will taxonomy look like as a subject? Para 5.
	Technology and collecting	Automated collection Pocket identifiers		EDIT 21 – What facilities will we use? Para 5.
		Georeferencing specimens - protocols	ATBI Manual. Chapter on georeferencing (WP7+WP4, Jan 09).	EDIT 21 – What facilities will we use? Para 7.
Research culture				
Developing the culture of taxonomy	Cohesion and common purpose to exploit the excitement, vitality and dynamism of the subject	Developing team models to support collective priorities – integrated teams across Europe. understanding taxonomic collaboration – drivers and rewards. Development to achieve new dynamics	Scratchpads (see D1+D2, 4.2). Define task forces for inventories (see D1+D2, 3.2). Research grants of WP2 in JPA4?	EDIT 21 – what will taxonomy look like as a subject? Para 9.
Research policy/ management tools				
Science values/impacts	Career credit Comparability Value tools	Systems for assignment and evaluation of scientific products – new products, team working, career development, reference to wider science policy.		EDIT 21 – what will taxonomy look like as a subject? Para 8.
	Recognition of changing nature of science	Career credit/recognition for database editing/alternative outputs		EDIT 21 – what expertise will we need? Para 4.
	Understanding the sociology of taxonomy	Defining success for networking and mechanisms		EDIT 21 – what expertise will we need? Para 6.
	Evaluation metrics			EDIT 21 – How will we manage taxonomy in Europe? Para.6
		Common bibliographic data formats Bibliometric tools		
Ethics and equity	Access and benefit sharing?	Coordinated representation across Europe.		
Sustainability	Expertise - Broad skills base, integrating, wide collaboration	Common training/complementary recruitment, placements, short-term fellowships for training?	Database of existing taxonomic training courses (WP8: http://www.e-taxonomy.eu/node/150). Experts-in training programme	EDIT 21 – what expertise will we need? Para 1.

			(WP8). Summer School in ATBI sites (WP8). Distributed School of Taxonomy (WP8). (See D1+D2, 4.4)	
	Funding advocacy	Integrated advocacy within science		EDIT 21 – what expertise will we need? Para 2.
	University engagement	?	Database of existing taxonomic training courses (WP8: http://www.e-taxonomy.eu/node/150).	
Training	Streamlined training provision for postgrads and early career researchers	Common skills framework Coordinated syllabi Distributed/integrated model	Database of existing taxonomic training courses (WP8: http://www.e-taxonomy.eu/node/150). Experts-in training programme (WP8). Summer School in ATBI sites (WP8). Distributed School of Taxonomy (WP8). (See D1+D2, 4.4)	EDIT 21 – what expertise will we need? Para 3.
Using research				
User needs	Responding to user needs	Tools for definition and dialogue Service standards and tools for provision Engaging with users	How to fill the gap Research-Users? (See D1+D2, 5.1). Workshops with users: <ul style="list-style-type: none"> - Users of Systematics (WP1+WP4, Jan 08. See D1+D2, 3.2 and 5.1) - Users of Collections (EDIT+SYNTHESES, Oct 08) - Users of scientific names (WP1+WP4, Feb 09) - More in JPA4? EPBRS Meeting, May 2009 	EDIT 21 – who will be using taxonomy/systematics and how? Para.1
	Biodiversity assessment	Rapid biodiversity assessment protocols	For users in Conservation: Creation of an ATBI demand with case studies (see D1+D2, 3.2). Define task forces for inventories (see D1+D2, 3.2).	EDIT 21 – who will be using taxonomy/systematics and how? Para.2
	Online tools			EDIT 21 – who will be using taxonomy/systematics and how? Para.5
Legal and regulations	Tracking policy/legal/regulatory developments	Awareness network/collaborative communications/influence		EDIT 21 – who will be using taxonomy/systematics and how? Para.3
Virtual world	Public use of virtual taxonomy		Status of Key-to Nature (http://www.keytonature.eu/)?	EDIT 21 – who will be using taxonomy/systematics and how? Para.4
Citizen science	Amateur involvement	Defining strategic framework and priorities for Amateur involvement Developing tools	Workshop with professional and non-professional taxonomists to investigate preconditions for collaboration	EDIT 21 – what expertise will we need? Para 5.

		Developing strategic partnerships with NGOs and others	(see D1+D2, 4.3). Information System including taxonomic societies (see D1+D2, 4.3).	
	User-driven research priorities			EDIT 21 – who will be using taxonomy/systematics and how? Para.6
Managing taxonomy				
Integration of effort/complementarity	Integrating research collections, information and research		Collections and Information: SYNTHESYS Network Activity-D? Research: Information System (see D1+D2, 4.3).	EDIT 21 – How will we manage taxonomy in Europe? Para.1.
	Rationalisation/centres for large-scale programmes			EDIT 21 – How will we manage taxonomy in Europe? Para.4
	Standardising information provision			EDIT 21 – How will we manage taxonomy in Europe? Para.5
Major initiatives	Collective engagement in major initiatives	GBIF CBoL ToL EoL	Crossed participation in Steering, Advisory and Institutional Committees (see D1+D2, 5.4). Seek MoUs in specific items (WP3.5 Workshop Nov 08)	EDIT 21 – How will we manage taxonomy in Europe? Para.2
Coordinating mechanism	?			EDIT 21 – How will we manage taxonomy in Europe? Para.3

Appendices

(components planned for JPA 3 month 24 - 41)

<i>App. no.</i>	<i>JPA 3 Component</i>	<i>Title</i>
01	1,3	C4.1.7 1 st report from the SPG including a draft research strategy proposal