



Project Newsletter 2

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1. Introduction

The second edition of the newsletter of the NO-REST consortium aims to inform about the progress of the work undertaken so far. The newsletter gives at first an overview of the preliminary results in the different Work Packages. At second, we report about the workshop on standardisation within eChallenges 2004 taken place in Vienna. Last but not least, we like to inform about the interim workshop 'Towards an Impact Assessment of Standards' hosted by CEN in Brussels, which will present first results of the NO-REST project.

2. First Results

The NO-REST project is organised in four, but strongly interrelated Work Packages (WP) focusing on the demand for and the supply of standards, the dynamics of standards and their impacts.

WP1: Standards' Interactions with Their Environments

The main objective of WP 1 is to construct a framework in which all of the factors that affect the standardisation process can be visualised and the interactions between them documented in a systematic way. In effect, WP1 describes the commercial and organisational environment in which standardisation takes place.

WP1 is examining the standardisation environment in the context of 'business models' - which in our definition refer to the commercial and organisational topologies of key product and service areas for which standards are relevant. This includes consideration of the business models of standards development organisations and consortia. The aim is to investigate the consistency and/or variance of business models between stakeholders and to indicate the implications in terms of demand for standardisation.

WP1 is exploring the socio-economic conditions and forces that will motivate the process of adopting, adapting, revising and replacing standards. WP1 work contributes to a better understanding of the emerging dynamics of demand, which can come from both ICT producers and users.

The WP1 tasks originally scheduled for the first half of the NO-REST project are now complete or nearing completion.

Draft versions of two significant core papers are now complete:

- Business models and the standardisation process have been prepared by TNO-STB to set out the theoretical basis for interpreting standardisation dynamics in their commercial and organisational contexts.
- The demand for standards of companies active in e-commerce has been prepared by Fraunhofer ISI (based upon existing data) in order to underpin the theory of standards demand with empirical data.

The empirical component of WP1, which aims to isolate examples of how various business model configurations affect the supply-demand relationship for standards, has been modified and rescheduled so that it can contribute more easily to the implementation of the impact assessment framework (see WP4).

WP2: Standards Setting Bodies' Adaptability

Today, a broad variety of different organisations are active in standards setting in the ICT domain. In addition to the 'traditional' accredited SDOs (like, e.g., ISO, CEN, or, albeit somewhat less 'traditional', ETSI), these include primarily consortia (e.g., the World Wide Web Consortium, W3C), and industry fora (such as, for example, the Wireless World Research Forum, WWRF).

Yet, even within each of these categories organisations differ widely in terms of, among other aspects, overall goals, sectors of activity, membership, business models, and liaisons. Additional differences may be observed in the standards setting processes, with respect to, for instance, the required level of consensus, the observation of due process, and the equality of their members. Moreover, membership is free in some organisations, while others charge fees. Also, individual members of the working groups or committees may (have to) act in different capacities, e.g. as national or corporate representatives, or as individual experts.

Among other issues, this diversity represents a problem for individuals and companies wishing to initiate a standards setting activity.



The question they need to address basically is 'Which organisation suits my needs best?'. In an attempt to help these would-be standards setters, WP2 has identified a set of characteristics to describe Standards Setting Bodies (SSBs). These characteristics have been used for a multi-dimensional classification of SSBs, which goes well beyond the typical distinction between SDOs, consortia, and fora.

To complement this description, three different categories of prospective participants in a standardisation activity were identified, and their respective high-level needs and requirements on an SSB were characterised:

- " 'Leaders' aim to control the strategy and direction of a consortium or an SDO' committee.
- " 'Adopters' are more interested in influencing individual standards.
- " 'Observers' are primarily interested in intelligence gathering.

Subsequently, the identified demands and requirements the members of each respective category have were mapped onto the SSBs' characteristics. This resulted in a set of questions prospective standards setters should ask themselves in order to identify the SSB most suitable for a given proposed standards setting activity.

In addition, a study is under way to learn more about the perceived 'credibility' of SSBs. For instance, common wisdom had it that the outcome of the formal SDOs' process is of 'higher value' than the outcome of an industry consortium. But is this correct? That is, among other things this 'credibility study' aims at finding out any relations that may exist between the source of a standard and its perceived relevance or value and therefore also impact.

WP3: Dynamics of Standards

A main tenet of the NO-REST project is that standards are not static, as most literature would have it, but dynamic. Our assumption is that the tenet of standard dynamics needs to be also reflected in standards impact analyses (WP4).

Therefore, the aim of WP 3 is

1. to acquire insight in the state of standards dynamics, that is in the overall stability of standards, and
2. to understand the causes of standards dynamics. One of these causes, namely problems of standard implementation, is addressed separately.

At present, apart from a scan of standardisation and innovation literature on standards dynamics, the project members contributing to WP 3 are drafting their case studies. The cases range from committee standards of formal standards bodies and consortia to de-facto standards - a variety which promises to highlight different aspects of dynamics. The (de facto) standards cases, which serve to identify and localise causes of standards dynamics, include X.400/ X.500, IEEE 802.11, recordable DVD, Symbian, Parlay, IP, RFID, standards for grid computing, SGML and XML. Moreover, quantitative analyses are underway based on the PERINORM and the JTC1 database that promise to shed light on the life cycles of formal standards and their influencing factors.

Ultimately the aim of WP 3 is to develop a heuristic model for the dynamic evolution of standards.

WP4: Impact Assessment of ICT Standards

Closed related to the insights of the other WPs WP 4 is devoted to develop methods and tools to assess the impacts of ICT standards on networking organisations at the micro-level and their comprehensive impact on the systems or macro-level.

Since the lack of well developed and tested methodologies to assess the impacts of standards, we had to look for orientation in the tool boxes for RTD evaluation and regulatory impact assessment. Based on the literature we identified the nine methodologies, like surveys, econometric models, case studies, but also foresight exercises. All these methodologies have general weaknesses and strengths, but they are also to a different degree applicable to ex ante or ex post impact assessments and to the above listed impact dimensions. Therefore one can already recommend a priori that depending on these intentions, but also on the respective technology or market, the selection of a specific methodology or even better a combination of complementary methodologies.

The second part of WP 4 on impact assessment will be devoted to implementation of the different methodologies. Within the framework of a survey among the members of ETSI most of the impact dimensions will be covered. In addition, data will be collected which allows us the performance of a control group approach and of small cost benefit analysis. Within the case studies of WP 3 the impact of the analysed standards will also be covered. Furthermore, the one or other case studies allows some benchmarking-like exercise and even a small scale network analysis. A foresight study in form of a Delphi study was already performed in the context of a forecasting workshop on telecommunication hosted by the ITU (International Telecommunications Union). Based on OECD data and stocks of ICT standards, we will investigate within an econometric model the impact of standards on growth.



Consequently, we will have with the completion of NO-REST a much better idea what impact assessment methodology works in which respect.

In addition to the development of single impact assessment methodologies, TNO-STB and Fraunhofer ISI have co-operated intensively during October to construct a prototype of an impact assessment framework. This provides a platform for the integration of the various impact assessment methodologies into the standards environment model.

3. Standardisation Workshop at eChallenges 2004

The eChallenges conference took place October 27-29 in Vienna, Austria. With over 600 attendees, up to eight parallel sessions and workshops, and a permanent project exhibition it was a fairly large event.

The workshop 'Standards and Standardisation for e-business' was designed to provide policy makers, representatives from industry and the services sector, as well as researchers from a variety of disciplines with a better insight into the complex and multi-disciplinary problems and issues surrounding standards and standardisation in the IT and e-business domain. The presentations covered the issues of 3G standardisation in China, mobile payment, standardisation processes within e-government, service standards, the role of SMEs in the standardisation process, and mechanisms to improve the transfer from research to standardisation in ICT (see the NO-REST web site for further details).

4. The NO-REST Workshop 'Towards an Impact Assessment of Standards'

The workshop aims to help develop a better understanding of the impact standards may have in the e-business and ICT sectors. To this end, the workshop will bring together experts from industry, academia, and SDOs to discuss the framework conditions for an impact assessment of ICT standards, the various dimensions of this impact, and how it could be measured. Moreover, first results of the NO-REST project will be presented and discussed.

The target group of the workshop include members of the European and national standards organisations as well as all other stakeholders involved in ICT and e-business standardisation, such as industry, NGOs, and regulatory bodies. The Workshop should also be of interest to researchers active in standards and standardisation research.

You are cordially invited to participate. Online registration is available at <http://www.no-rest.org/>.

For information about how to reach the CEN Management Centre, and for other travel-related information, please see <http://www.cenorm.be/cenorm/aboutus/information/visiting+us/index.asp>.

Agenda

Time	Topic	Speaker
10.00	Welcome	Knut Blind, FhG ISI
10.05	Introductory Remarks	Frithjof Maennel, DG INFO
10.20	Implementing standards - lessons from practice	Helmut Schink, Siemens
10.45	ICT standardisation for SMEs: benefit or burden?	Freek Posthumus, NORMAPME
11.10	Dynamics of standards - a standards setting body's point of view	John Ketchell, CEN/ISSS
11.35	Standards and other means of interoperability	Martin Zelm, NoE INTEROP
12.00	Discussion	
12.30	Lunch	
13.30	The NO-REST project - a brief introduction	Knut Blind, FhG ISI
13.40	The dynamics of standardisation and implementations	Tineke Egyedi, TU Delft Kai Jakobs, RWTH Aachen
14.00	A general framework of ICT standards impact assessment	Richard Hawkins, TNO-STB
14.20	An empirical implementation of ICT standards impact assessment	Knut Blind, FhG ISI
14.40	Coffee Break	
15.00	Round Table and Final Discussion	All presenters
15.50	Summary of Workshop	
16.00	Close of Workshop	