

EU US Standards Comments  
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These comments are intended to amplify comments made orally at the meeting on January 10, 2005 to discuss ways to enhance the transatlantic economic relationship.

The two long-term strategies in *Standards and Competitiveness—Coordinating for Results Removing Standards-Related Trade Barriers Through Effective Collaboration* are:

- *Partner with colleges/universities on R&D aspects of new technologies and influence standards at earliest stages of development of new technologies*
- *Expand inclusion of standards curricula in engineering and business schools, through partnerships with organizations such as the Accreditation Board for Engineering and Technology (ABET), ANSI, National Science Foundation, engineering societies, and trade associations.*

One of the goals of the current US National Standards Strategy is

- *ANSI should develop a program to introduce standards and their effect on technology and trade into university curricula in business, engineering, and public administration;*

In support of this goal I have worked for several years with Professor Wilfried Hesser at Helmut Schmidt University(HSU) in Hamburg to develop a transatlantic standards education program for universities. Last summer, representing ANSI, I participated in an educational outreach project HSU is doing for the EU to introduce a master's level course on standardization in Asian universities.

Our initial collaboration had been to develop e-learning modules that could be used in programs in the EU and US to better understand the corresponding standards systems. Although we were not able to obtain funding to develop these modules we have started the process by sharing existing lecture materials- all available in electronic format. We believe that development of modules specifically to address TBT issues affecting transatlantic trade would enhance efforts to improve US – EU economic integration. Modules would be developed for use in university programs in the US and EU but would also be useful in any continuing education or training use. We would propose that modules be developed in a SCORM compatible format so that they could be used on any e-learning platform.

We believe that such an effort, ideally jointly supported by the US and EU, would address some of the topics listed in the Federal Register request of August 27, 2004 including:

- *Where are there opportunities for further and deeper cooperation?* This is an opportunity, the structure already exists.

- *What should be done to better mesh U.S. and EU regulatory approaches?* Regulatory issues related to standards for example the New Approach and in the US, as an example, the role of various levels of government in areas such as building codes and standards could be addressed.

With regard to the agenda of the January 10, 2005 meeting:

*What other approaches would you suggest for government or industry?* A sustained education and outreach effort at the university level.

*How can the U.S. and EU cooperate more effectively on standards issues?* By jointly supporting and sustaining a university-level education and research program on standards and conformity assessment issues related to transatlantic trade

Attached are two draft documents that outline an education and research program to address standards and conformity assessment issues affecting transatlantic trade. The first document outlines a research program to define the issues. We believe that this research is necessary to achieve some consensus on the issues and to develop the most current material for the learning modules. We also recommend that there be an analysis of the need for education in industry, academe and government around these issues. This would build on surveys already done by HSU and the Global Standards Center at Catholic University (CUA) but would address issues specific to transatlantic trade issues. In the process of gathering this information, awareness of the issues would be raised and potential users of the modules would be made aware of the project.

The curriculum would consist of a series of modules developed as a cooperative effort of European and American universities led by HSU and CUA.

Funding for this effort should be adequate to support workshops in the US and EU, implementation of the modules in a SCORM compatible format, staff support in Hamburg and Washington, DC for a project duration of 3 years.

If there is interest in this proposal, we would be please to prepare a formal proposal.

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## Abstract

# Development of a curriculum for “Standardization in companies and markets”

- Requirement for eliminating trade barriers between  
Europe and the USA -

- Draft, 2004 -

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## Summary

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The EU and the USA are each other's main trading partners and account for the largest bilateral trade relationship in the world. We will promote the EU-US trade relationship by developing a curriculum for "Standardization in companies and markets" with our American partner. The programme will target students of various existing master's programmes and will have to take account of the special requirements of the EU-US trade relationship. To do justice to the purpose of the project, which is to train and qualify students for international standardization and to promote awareness of *Technical Barriers to Trade* (TBT) on the EU-US trade, we will set up and implement the following structures: professional network for Standardization, curriculum for "Standardization in companies and markets", teaching materials and an online curriculum on an e-learning platform. The choice of teaching media and the extraordinary interest of our partners will guarantee sustainability of the project.

## Objectives

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### Overall objectives

Establishment of a sustainable European-American multidisciplinary academic & educational infrastructure in the field of standardization

Intensification of American-European co-operation in the fields of education, standardization, knowledge transfer and trade

This corresponds to the following project objectives:

Evaluation of needs in education and training in both the European and the American standard systems with an evaluation form.

Promotion of awareness of the significance of standards and standardization activities as such with regard to their socio-economic impact on modern societies, regional integration and globalisation. Analysis of country-specific aspects of standardization in the American region and comparison of especially the American and European standardization approach with the International Standardization

Using the transfer of knowledge and information to reduce TBT unintentionally imposed on both European and American exporters by the specifics of their standardization system.

Online provision of the curriculum using the e-learning platform "Ilias Open Source", which has already been successfully implemented at the Universität der Bundeswehr Hamburg.

With regard to sustainability, an access fee for the online curriculum will be charged after the completion of the proposed project. These revenues will be reinvested in the online curriculum to ensure that it remains up-to-date and well-maintained.

## Identification of perceived needs and constraints in the target countries

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The EU and the US are each other's main trading partners (taking goods and services together) and account for the largest bilateral trade relationship in the world. The total amount of 2-way investment amounts to over € 1.1 trillion, with each partner employing about 3 million people abroad. In the year 2001, exports of EU goods to the US amounted to € 237 billion (24.4% of total EU exports), while imports from the US amounted to € 194 billion (19% of total EU imports). Concerning trade in services, exports of the EU amounted in 2000 to € 117 billion (40.3% of total EU exports) while imports from the US amounted to € 116 billion (40.7% of total EU imports).

The *New Transatlantic Agenda* (NTA) and in the *Transatlantic Economic Partnership* (TEP) were jointly set up by the EU and the US, to strengthen and consolidate the multilateral trading system, and to progressively reduce or eliminate barriers that hinder the flow of goods, services and capital between the EU and the US. The EU-US partnership has also been reaffirmed at the EU-US summit of 2 May 2002 through the launch of a "*Positive Economic Agenda*". The objective of this exercise is to identify and focus on those specific areas where EU-US co-operation can deliver concrete, mutually beneficial results in the short to medium term<sup>1</sup>.

In continuing the work of the "General Agreement on Tariffs and Trade" (GATT), the World Trade Organization has taken on the task of reinforcing the multilateral world trade system and preventing protectionism and bilateralism. An important contribution to this is the Agreement on "Technical Barriers to Trade" (TBT), which was passed by 46 signatory states in 1995. A distinction is made here between technical trade barriers arising from differing legal requirements, differing national standards and discrepant test and certification procedures.

The TBT Agreement demands that national regulations be transparent and justified and not have a discriminatory nature. In addition, the regulations should be based on international standards wherever possible. In the Agreement on Technical Barriers to Trade member countries are called on to reach agreements on the mutual recognition of calibration certificates, test reports and certificates of conformity on the basis of the accreditation of competent laboratories and certification bodies and thus develop an internal system of conformity assessment .

To support and consult representatives of the European and the American government the "Transatlantic Business Dialogue" (TABD) came into being at conference in November 1995. The aim of the TABD is to eliminate bilateral and multilateral trade and investment barriers. The TABD develops common approaches for solving impending or existing market obstacles, which can then be implemented directly or recommended to the governments of the EU and USA.

A declared aim of the TABD is to influence the export trade policy of the EU, the USA and the World Trade Organization, WTO, in a lasting way. The TABD is an important part of the NTA, which was agreed between the EU and the USA at the end of 1995, the aim of which was to improve transatlantic relations. In essence it is concerned with abolishing trade and investment barriers and establishing a coordinated procedure in multilateral trade issues, particularly within the framework of the World Trade Organization, WTO. The TABD members are great European and American companies e.g. Siemens, Bayer, Daimler-Benz, Deutsche Telekom, Bertelsmann, Michelin, Unilever, Hoffmann-La Roche, British Aerospace, Ericsson, Glaxo Wellcome und ABB, AT+T, Boeing, Ford, Monsanto, Eli Lilly, Dow Chemical, EMI, IBM, UPS, Goodyear, Pfizer und Bethlehem Steel.<sup>2</sup>

A fundamental problem, it appears, is one of information and knowledge transfer especially for the medium-sized American and European companies. Businesses operating in either the American or the European market need a sufficient amount of general information and knowledge about the basic features of the other's standardization system and about the directives and standards that their products have to comply with. Most businesses along with other relevant actors e.g. governmental agencies are confronted with the following problems:

- Businesses on both sides who would like to offer their goods in the Single European Market tend to be ill-informed about the general features of the other's standardization regime and the specific demands they have to meet.

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<sup>1</sup> See European Commission (2002): Report on United States barriers to trade and investment, Brussels

<sup>2</sup> See „TABD“ in <http://www.tabd.com>

- Trade is hindered by tariff quotas, complicated registration, documentation and customs procedures, expensive charges, import prohibitions, other technical requirements, sanitary measures, government procurement, antidumping measures, duty measures, export restrictions, subsidies, direct foreign investment limitations, tax discrimination, different intellectual property rights, patents and expensive services

## **Target groups of the project**

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### **list of target groups with an estimate of the anticipated number of direct and indirect beneficiaries**

Given the identified needs and constraints in the target countries the following target groups have been chosen:

Direct beneficiaries (two universities):

- Academic staff of universities and schools for higher education, i.e: professors, tutors, lecturers, postgraduate students, research assistants. Faculties/departments of Economics, Business Administration and Engineering Sciences are being targeted in particular.
- Students of Economics, Business Administration and Engineering Sciences.

Indirect beneficiaries:

- American National Standardisation Bodies and European Standardisation Bodies, professionals in standardisation and standardisation qualification.
- Business community & industry, especially companies exporting to the Single European Market. Support especially of small and medium sized companies independent of institutional factors (power of knowledge).
- Chambers of commerce and similar commercial associations & organisations.
- Government bodies in active standardisation, export and educational issues.

### **reasons for the selection of the target groups and activities**

Academics are already engaged in professional qualification and are in the best position to assess the role standards (and conformity assessment & accreditation) play in socio-economic development within their home region and for regional & international integration. Academics usually adhere to the basic principles and ethics of science and do not serve particular interests or interest groups. The courses offered in the respective disciplines will disseminate information & knowledge about the European standardisation approach among students. The link on the academic level will provide the best suited channel of information flow between the American region and the European side. Students in turn will apply the knowledge gained in the courses when entering their working lives.

Thus European -American co-operation will be intensified, and access to the Single European Market facilitated for the businesses and organisations they are going to work for.

Selected partners from business community & industry will provide practical experience gained with exports to the single European market.

Chambers of commerce and similar commercial associations & organisations are particularly active in the field of non-academic qualification and will function as an interface to the business community & industry.

Governmental bodies active standardisation, export and educational issues will provide organisational and logistical support as well as know-how.

## **relevance of the project to the target groups**

Standardisation issues will enter both academic and non-academic professional teaching in the American and European regions. Academics active in the project will discover standardisation issues as promising research subjects. Students will acquire valuable knowledge in the field of European or American standardisation and enjoy better prospects in the labour market, especially with respect to export-oriented businesses. Students will also be inclined to take advantage of working opportunities in Europe or in the USA, be it on the academic or business level. Informational gaps with regard to the specifics of the different standardisation systems will be closed. Access to the European and American single market will be facilitated for export-oriented businesses. Governmental bodies will be supported in their efforts to enhance the mobility and international competitiveness of local business & industry.

## **Methodology**

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### **Description of Project Structure**

The goal of the project is to develop a curriculum for "Standardisation in Companies and Markets". Therefore we need highly qualified participants, who in turn need very good support. This is the underlying reason for our decision to invest the proposed amount in project management. By uniting the Universität der Bundeswehr Hamburg, Department of Standardisation and Technical Drawing and the Catholic University of America, Chair in Standardisation, we have formed a very competent project management team. The team can call on a wealth of experience from similar projects, especially in developing curricula.

### **Implementation of the project**

We plan to meet in workshops with a defined goal and structure. Although we have a wealth of experience in developing curricula for "Standardisation in Companies and Markets" for Europe, we feel the challenge here lies in developing a curriculum that gives full consideration to the American and European aspects of Standardisation. These discussions and agreements will involve meeting the partners in person. Apart from the cost advantages of travelling to American partner countries, the visits will have the added benefit of acting as a promotional tour for the project. This means that the project management team will be able to present the project to potential decision makers and interested groups/institutions. Our partners will consult us to finalize recommendations for these target groups.

In designing the outcome of the project, we have opted for "product" features that offer benefits for as many people as possible. This decision will ensure the sustainability of the curriculum, which—owing to its multidisciplinary nature—will cater to students from a variety of existing master's programmes (business administration, economics, engineering, law). In addition to the textbook, the teaching media will also include an e-learning platform that is accessible from all over the world.

## **Expected results**

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### **how the project will improve the situation of the target groups**

Students:

- Students will be introduced to a multidisciplinary and interdisciplinary research approach.
- Students will gain a sound understanding of the impact that standards and standardisation activities have on virtually every technical and socio-economic sphere.

- Students will develop skills and gain knowledge that will enhance their prospects on the labour market. Export-oriented businesses, in particular, will be pleased to employ graduates with substantial expertise in the field of European standardisation and certification. These graduates will contribute to the reduction of technical barriers to trade and may also be inclined to take up employment opportunities in Europe or move to Europe on behalf of their employer.
- Postgraduate students pursuing an academic career will be inclined to do research on standardisation issues, the European Standardisation System in particular, or other topics related to the EU. These students may also be inclined to take up employment opportunities in Europe, especially at European universities. Ultimately, academic exchange will be enhanced, as will the mobility of graduates and interregional exchange in general.

#### Academic staff at Universities:

- In a similar way to the students, academics will be introduced to a multidisciplinary and interdisciplinary research approach.
- Academic staff active in the project will gain substantial know-how in the field of standardisation and will appreciate standardisation issues, in general, as well as the European standardisation approach, in particular, as promising research subjects.
- Academics will play an active role in the network established during the course of the proposed project and contribute to ongoing research at a later stage.
- New opportunities for international and interregional research co-operation with various partners (academics, business & industry, Standardisation Bodies) will be opened up.
- With the knowledge gained in the project, academics may be inclined to take up consultancy business.
- Participation in the project will undoubtedly increase the reputation of those participating among their colleagues.
- The well-established European-American academic links will provide an excellent interface for information flow.
- Academics will enhance their skills in project management and the use of e-learning tools.

#### American National Standardisation Bodies/ European SB/ American SB:

- Standardisation Bodies will be spared costly activities, i.e. the dissemination of standards-related information & knowledge among business & industry in the form of qualification courses and the like.
- Standardisation Bodies will benefit from the insight gained from the multidisciplinary scientific approach.
- The European side will gain a sound understanding of the problems that export-oriented American businesses face in the Single European Market due to the European standardisation regime.
- New opportunities for co-operation will open up (see academic staff).

#### Economic effects:

- Reduction of technical barriers to trade by means of information & and knowledge transfer (as mentioned before in various contexts).
- The information & and knowledge on standardisation disseminated in the American region will help relevant decision-makers to adopt an appropriate standardisation approach, be it on a political or business level. Appropriate standardisation measures will significantly contribute to economic development, especially in developed and underdeveloped countries.
- The competitiveness and international mobility of American and European businesses will be enhanced.
- Enhanced mobility of all parties involved in the project.

#### Political and cultural effects

- The information and knowledge exchange will not only concern standardisation and standardisation systems, but also political systems and cultural aspects. As a consequence,



mutual understanding with regard to political and cultural aspects will also be increased, European-American ties will be strengthened.

**how the project will improve the managerial and technical capacities of the target groups or the partners (where applicable)**

- Students and academic staff directly involved in the proposed project will develop/enhance their skills in project management, academic writing and the use of e-learning tools.
- Students and academics will learn to appreciate a multidisciplinary scientific approach.
- Academic networking skills will be improved during the course of the project.
- Standards Bodies will be provided with a didactic concept and a modular curriculum that may serve as a template for their own qualification activities.