Implementation Plan

Implementing the CEN-CENELEC-ETSI Masterplan on Education about Standardization

This Implementation Plan is based on the approach and structure defined in the Masterplan. It identifies **15** actions for education about standardization in support of the Masterplan in 2013, the first year of implementation of the Masterplan. The Annex of the Implementation Plan details these 15 actions and also gives a brief outlook on the following years.

Some of the specified activities make sense to be executed jointly, others will be carried out individually by one of the ESOs or NSOs, with or without involvement of other stakeholders or target groups, at European level, or at national level. The Implementation Plan does not at all exclude specific activities of any stakeholder in support of standards education but welcomes any initiative making use of specific strengths or meeting special needs related to standards education.

Governance

A European Stakeholder Steering Group (ESSG) will provide a top-level structure, representing all relevant European stakeholders to ensure appropriate support to the Masterplan and provides guidance and recommendations.

1. Action: Create a European Stakeholder Steering Group

Management

The Joint Working Group Education about Standardization (JWG-EaS) will drive, coordinate and oversee European support and initiatives at European level and foster the creation of national structures. It will set-up Task Forces to accelerate joint work when needed.

2. Action: Refocus and empower the Joint Working Group's so that its aims and activities support and provide the driving force for the Masterplan

3. Action: Establish needs in order for members to create national EaS structures

4. Action: Implement an outreach plan for the Masterplan

5. Action: Identify cooperation partners

Analysis
A Strategic analysis will ensure that future Implementation Plans are steered in the most effective direction.

6. Action: Perform a gap analysis of education about standardization

7. Action: Make an inventory of current teaching

8. Action: Identify the barriers to standardization education, define objectives, formulate solutions

Events
Raise awareness and support for education about standardization and discuss best practices through involvement with relevant stakeholders.

9. Action: Host the ICES[1] 2013 conference

10. Action: Host the EURAS[2] 2013 conference

[1]International Cooperation for Education about Standardization [2] European Academy for Standardization

Consultation & partnering
Ensure the involvement of key stakeholders, including business, educators and trainers. Partner with other formal or informal SDOs as appropriate.

11. Action: Identify (and define strategies to engage) key European stakeholders

12. Action: Establish a European EaS network

13. Action: Initiate a dialogue with relevant EC services to get Member State support for the Masterplan

Projects
In order to ensure results, both in the short and long term, fast track and high impact actions should be executed at national level, and supported by

the European level. Projects to involve and directly work with target groups may also be setup at European level.

14. Action: Establish Task Forces (under JWG-EaS) to explore needs and feasibility and foster initiation of a series of projects having fast and/or high impacts

Teaching
Ensure that standardization is taught throughout Europe and that a basis for standardization as an academic discipline is developed.

15. Action: Refine and extend the existing repository of teaching materials

Annex 1- detailed actions of the implementation plan

Introduction

This Implementation Plan provides recommendations set by CEN/CENELEC and ETSI for education about standardization in Europe. This document outlines the actions which will be run in 2013 to set-up and implement the CEN-CENELEC-ETSI Masterplan.

This Implementation Plan is based on the High level structure of overall EaS work programme described in Figure 7 of the Masterplan. In practice, the following categories of actions should be run during 2013, the first year of implementation of the Masterplan:

- Governance

- Coordination

- Analysis

- Events

- Consultation and partnering

- Teaching

- Projects

Each table in the following sections present the initiatives which need to be done in order for future generations to ensure that Europe is world class in the field of standardization, hereby increasing innovation and growth in Europe.

Governance

The European Stakeholder Steering Group (ESSG) will provide a top-level structure, representing all relevant European stakeholders to ensure appropriate support to the ESO Education about Standardization Masterplan and provide effective management, leadership and coordination. Its duties will include but not be limited to building support, offering high-level guidance and coordinating with other bodies and initiatives within the framework.

The ESSG will be composed of approximately ten persons from a variety of European countries, including a CEN, CENELEC or ETSI senior officer who ensures the link with and reporting line to the ESO Joint President's Group. Members considered for this group will be representatives selected from the following areas:

- business,
- vocational education and training,
- academia,
- students,
- trainers,
- teachers,
- trade unions,
- consumer organizations,
- European Standards Organisations,
- Chair of JWG-EaS
- European Commission (entities responsible for standardization and education, respectively),
- European Free Trade Association (EFTA)

Table 1 presents the recommendations from CEN, CENELEC and ETSI for governance of the EaS initiative.

Goal			
2013 Goals	**Success Criteria**	**Responsible**	**Resources**
Create a European Stakeholder Steering Group with • Appropriate representation • Agreed terms of reference	Launch at the latest by January 2014	JWG-EaS with agreement from JPG	Time (CCMC Secretariat, ETSI Secretariat, JWG-EaS Chairman, Volunteers from JWG-EaS)
Future Goals			
• Link up, advise and support the work of the JWG-EaS			

Table 1: Governance

Management by JWG-EaS

The Joint Working Group Education about Standardization will coordinate, guide and lead European support and suggest initiatives towards European stakeholders as well as fostering the development of national structures.

The JWG-EaS also carries out communication and awareness raising activities, secures commitment and resources, monitors and evaluates progress on the Masterplan and future implementation plans. The JWG-EaS links with the international initiatives run by ISO, IEC and ITU.

Table 2 presents the recommendations for management by JWG-EaS.

Goal			
2013 Goals	**Success Criteria**	**Responsible**	**Resources**
Refocus and empower the Joint Working Group's aims and activities to support the Masterplan objectives: • Revise terms of reference • Increase commitment of national members to the JWG-EaS • Analyze situation relating to national EaS structures and identify best practice • Prepare guidance and support material for NSBs to assist in creating national EaS structures	• New terms of reference • Commitment from member Bodies • A set of best practices • A short document stating the benefits of participating in JWG EaS	JWG-EaS	Time (CCMC Secretariat, ETSI Secretariat, JWG-EaS Chairman, JWG-EaS Members)
Establish the members' views and needs in relation to creation and objectives of national EaS structures	Report on what should be the missions of the national EaS structures	JWG-EaS members	Time (JWG-EaS Members)
Propose and implement an outreach plan aimed at Masterplan's target groups (proposing targets, resources)	Plan validated by ESSG	JWG-EaS	Time (CCMC Secretariat, ETSI Secretariat, JWG-EaS Chairman, JWG-EaS Members)
Identify relevant partners for cooperation with JWG-EaS	List of partners and possible way of cooperation validated by JWG-EaS	JWG-EaS	Time (CCMC Secretariat, ETSI Secretariat, JWG-EaS Chairman, JWG EaS Members)

Future Goals
• Prepare a detailed implementation plan for the newly created structure (ESSG, JWG-EaS and national) to manage projects and initiatives, ensuring the strategic goals of this Masterplan are met • Establish national EaS structures • Establish national action plans • Engage with European Stakeholders • Establish and implement a visibility and outreach plan • Coordinate and cooperate with relevant international partners

Table 2: Management by JWG-EaS

Analysis

Strategic analysis is required in order to ensure that future Implementation Plans are steered in the most effective direction. The analysis will be an in-depth study, including but not limited to where education about standardization is most crucial, which gaps need to be filled and which stakeholders need to be involved.

The scope of and ressources needed for the analysis will be further defined in a detailed project description, which will be developed during the initial phases of the Implementation Plan.

Table 3presents the recommendations of CEN, CENELEC and ETSI on the strategic analysis.

Goal			
2013 Goals	**Success Criteria**	**Responsible**	**Resources**
• Perform a gap analysis of education about standardization • Make inventory of current teaching (also needed to evaluate impact of measures at a later stage) Identify what are the barriers to standardization education and define objectives, formulate possible solutions	Report[1]	JWG-EaS	External support needed
• Define who needs which form of education(in relation to top-down and bottom-up activities)	Report	JWG-EaS	External support needed

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[1] One report per country. Based on the country reports and the workshop, the project leader drafts an overall common report which gives an overview of the situation in Europe including perceived barriers and actions to be taken. Results will be shared at a workshop in Brussels.

• Identify the profiles of people for whom standardisation knowledge is needed.[2]			
• Prepare an inventory of existing EaS initiatives • Use feedback from target groups to identify gaps, needs and opportunities for bottom-up initiatives • Identify potential measures targeted at students, teachers and researchers	• Report • Validation from ESSG	JWG-EaS	• Time (Task Force Members) • Possibly external support needed
Future Goals			
• Define how to fill-in the gaps • Explore commitment and resources of stakeholders • Define recommendations • Similar analysis for the lower education levels • Feed into future implementation plans and outreach plans			

Table 3: Analysis

Events

On the 29th of June 2012 the first event held by JWG EaS about Education about Standardization took place. The goals of the event were:

- To inform key stakeholders about the importance of education about standardization

- To present the CEN, CENELEC and ETSI Masterplan on education about standardization and receiving feedback on this plan.

More than 90 delegates from business, education, standards organizations, governments and the European Commission attended the event. The response and comments received from the participants of this event underlined that education about standardization is of strategic importance for Europe. In addition to this, it was stressed that much more needs to be done in order to ensure that students and professionals learn about standardization during their formal education and/or professional training. At the event

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[2] These are people within companies, but also people in trade associations, government, standards bodies and NGOs. In order to get information for this report, just asking a representative sample of companies about their profiles would not be the right method because of lack of standardisation awareness and knowledge. Rather, this project would profit from a benchmark with similar studies in other fields (e.g., logistics, quality management) plus talks per telephone with some forerunner companies.

support was given to the general elements of the Masterplan. In order to raise more awareness and support for education about standardization and discuss best practices, similar events must be organized by JWG-EaS, and relevant existing events should be hosted by the European Standards Organizations.

Table 4 events which will be held or hosted to support EaS are presented.

2013 Goals			
Goal	**Success Criteria**	**Responsible**	**Resources**
Host and participate in the ICES Conference (June 2013)	Number of participants	ETSI (hosting), JWG-EaS (participating)	Meeting facilities, sponsorship (social event)
Host and participate in the EURAS Conference (June 2013)	Number of participants	CCMC (hosting), JWG-EaS (participating)	Meeting facilities, sponsorship (social event)
Future Goals			
• Workshop presenting the results from the Analysis • Increase participation in these and other EaS events			

Table 4: Events

Consultation and partnering

A core element in the Implementation Plan is consulting and partnering. Here the involvement of businesses, universities, and other major stakeholders should be ensured. Only when this is is ensured, will the necessary results, which are needed in order to strengthen the field of standardization in Europe, be achieved.

Table 5 shows the recommendations of CEN, CENELEC and ETSI in regard to consultation and partnering.

Goal			
2013 Goals	**Success Criteria**	**Responsible**	**Resources**
Identify key European stakeholders: • Intermediaries • Beneficiaries Target groups	Validation by ESSG	JWG-EaS	Time (CCMC Secretariat, ETSI Secretariat, JWG-EaS Members)
Define strategies to engage: • Intermediaries, Beneficiaries and Target Groups • Specifically the business community to interest them in the need to	Relevance of the strategies with regard to the	ESSG	Time (CCMC Secretariat, ETSI Secretariat)

address intermediaries to include standardization in education and training	resources available to the JWG-EaS Members		
• Define role of EaS network for achievement of Masterplan objectives • Establish European EaS network (use learning and contacts from EaS event of June 2012)	Number of members	JWG-EaS	Time (CCMC Secretariat, ETSI Secretariat, JWG-EaS Members)
Explore with relevant EC services: • A targeted joint EC-ESO action to engage key stakeholders • The possibility to engage Member States and get their support for the Masterplan objectives	Interest of DG Enterprise and DG Education and Culture	JWG-EaS	Time (CCMC Secretariat, ETSI Secretariat)
Future Goals			
• Communicate with European trade associations about the strategic importance of standardization and, therefore, of education in this field • Stimulate these trade associations to communicate the importance of standardization as well as education about standardization to their national members so that these, in turn, can communicate this to their members (companies) as well as to educational institutions and policy makers in their country • Involve trade associations at the European level in future activities in stimulating standardization education			

Table 5: Consultation and partnering

Projects

In order to ensure results both in the short and long term, fast track and high impact actions should be executed. These actions should carried out at national level, but be supported by actions at the European level. At national level these actions should be initiated and carried out by JWG EaS members and at European level task forces, in which projects are identified and execute, should be established and run ad hoc.

Table 6 presents the recommendations of CEN, CENELEC and ETSI for projects.

Goal			
2013 Goals	**Success Criteria**	**Responsible**	**Resources**
Establish Task Forces accountable to- and managed by the JWG-EaS: • define membership • define objectives	Established Task Forces where necessary	JWG-EaS	Time (CCMC Secretariat, ETSI Secretariat, JWG-EaS Chairman)

Execute fast-track and high impact actions[3]	Expected impact	JWG-EaS	Time (Task Force Members)
Future Goals			
• Identify measures to be implemented • Develop an implementation plan • Execute the implementation plan			

Table 6: Projects

Teaching

The essence of the Masterplan is to ensure that present and future employees and leaders have sufficient knowledge about standardization to keep Europe at a world class level. Standard setters must, in cooperation with key stakeholders (e.g. schools and universities), ensure that standardization is taught throughout Europe and that a basis for standardization as an academic discipline is developed.

Table 7 presents the CEN, CENELEC and ETSI recommendations for teaching.

Goal			
2013 Goals	**Success Criteria**	**Responsible**	**Resources**
Refine, extend and enrich the repository of teaching materials	Number of available resources	JWG-EaS	Time (JWG-EaS Members)
Future Goals			
• Managing the repository • Train the trainers • Give guest lectures			

Table 7: Teaching

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[3] See annex 1- overview of possible fast-track actions to be reviewed by the Task-Force

Annex 2- possible fast-track actions

Target group	Level	
	European	National
Students	Best paper award • develop a price for students who write a paper about (benefits of) standardization • To be arranged: description of challenge, distribution (via NSOs), jury • Financing: ESOs • Leads to awareness among both students and their teachers • University level or also one level lower (higher vocational education)	Best thesis award At the national level because most students write in their national level
		National translations of existing teaching materials
		Guest lectures by • NSO staff • Members of standardization committees
	Internship at ESO • Source of new ideas • Creates a relationship with university / school • Investment: fee + travel and accommodation grants + time for coaching	Internships at NSO • Possible research outputs
	Innovative material such as, for example: • Games • Applications for smart phones	Innovative material such as, for example: • Games • Applications for smart phones
University teachers	Website including • Teaching module on European standardization • Repository • Links to other sources for standardization education • Contact details for questions	Website including • Teaching module on National standardization • Other national teaching materials • Repository • Links to other sources for standardization education • Contact details for questions
		National translations of existing teaching materials when necessary
NSOs	Prepare Guidance document: how to implement standardization education?	
	Exchange of experiences • Continuation of current JWG EaS activities • CEN-CENELEC Management Centre might try to involve more CEN/CENELEC members.	

	Involve CEN-CENELEC PR Round Table	
		Investigate possibility that standards are available for students at their university or at another location or online for free or at a reduced price
		Awareness-raising activities including • Developing and distributing awareness-raising material, for example videos and pamphlets • Participating in career fairs/exhibitions to let students know the relevance of standards/standardization in their future career • Holding events at national level
Industry and other stakeholders	Create a European Stakeholders Steering Group in which major stakeholders are represented. The creation of such a high level group is necessary for: • public governance of this issue, • preparation and approval of the Implementation Plan proposed by the task force of EaS, • making an inventory of the need for education and qualification, • discussion of the possible solutions, exploring the availability of resources, • creating support in all relevant parties (industry, EU, EFTA, national governments, trade organisations, others), requesting commitment from major stakeholders, • taking the necessary initiatives • monitoring the progress • financing all initiatives.	
	Convince industry leaders of strategic importance of standardisation and consequently the need for education about standardisation • Prepare a short document with arguments • Communicate with European trade associations about the strategic importance of standardisation and, therefore, of education in this field • Stimulate these trade associations to communicate the importance of standardisation as well as education about standardisation to their national members so that these, in turn, can	

	communicate this to their members (companies) as well as to educational institutions and policy makers in their country • Involve trade associations at the European level in future activities in stimulating standardisation education	