5-6 December 2013, Milan & Ispra, Italy



ADOPTION OF THE EUROCODES IN THE BALKAN REGION

Summary of the questionnaires filled by National Authority relevant representatives from non-EU countries in the Balkan region





Outline

- About the workshop
- Questionnaire objective and generalized data requirements
- Data analysis
- Questionnaires conclusions and recommendations







ADOPTION OF THE **EUROCODES**IN THE **BALKAN** REGION

5-6 December 2013 MILAN & JRC-ISPRA, ITALY

Organized by **EUROPEAN COMMISSION**

DG Joint Research Centre

Supported by
EUROPEAN COMMISSION
JRC Enlargement and Integration Action



About the workshop

The workshop is focused on progress and specific needs for adoption and implementation of the Eurocodes and related EN standards in the Balkan region.

OBJECTIVES:

- **Assess** the level of commitment and the **progress** of adopting the Eurocodes;
- **Assess** the level of **harmonization** of national policy/legislation with EU regulatory frameworks;
- **Assess** the **progress** of definition of Nationally Determined Parameters (NDPs)
- Define the strategies for training and elaboration of guidelines and training materials;
- **Facilitate** exchange of views, knowledge and information between EU experts and representatives of the non-EU countries in the Balkan region;
- Facilitate regional cooperation in preparing National Annexes and harmonization of NDPs



About the workshop – Map of non-EU countries in Balkan region



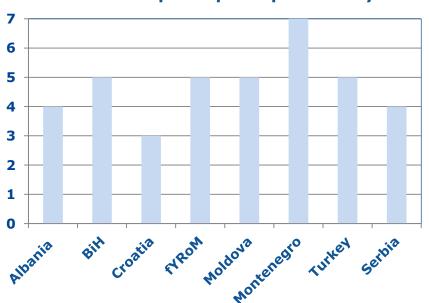
About the workshop

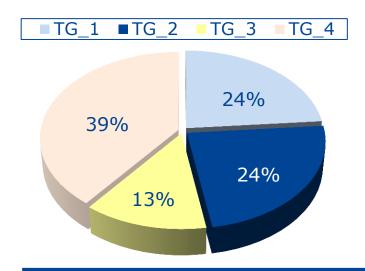
Non-EU countries in Balkan region	No of participants
Albania	4
Bosnia and Herzegovina	5
Croatia	3
the former Yugoslav Republic of Macedonia	5
Moldova	5
Montenegro	7
Turkey	5
Serbia	4
TOTAL	38



About the workshopNumber and groups of participants from non-EU countries

Number of participants per country





Groups of participants

- TG_1: National Authorities and policy decision makers
- TG_2: National Standardization Bodies
- TG_3: Professional users of standards
- TG_4: Institutions who will stream the determination of NDPs and the application and training on the Eurocodes





Questionnaire – objective and generalized data requirement

OBJECTIVE:

To provide insight into current progress in the adoption and implementation of the Eurocodes in non-EU countries in the Balkan region.





Questionnaire objective and generalized data requirement

National regulatory framework

- National action plan
- Eurocodes using as primary standards or in parallel
- Participation of relevant national institution
- Needs for harmonization of national legislation with EU legislation

NDPs, NA and harmonization

- National Technical Committee
- Progress of translation
- Regional cooperation in the process of translation
- Progress of definition of **NDPs**
- Acceptance of recommended NDPs
- Regional cooperation in definition of NDPs
- Regional network
- Barriers for elaboration of NA
- Progress of adoption of harmonized EN standards

Education and training

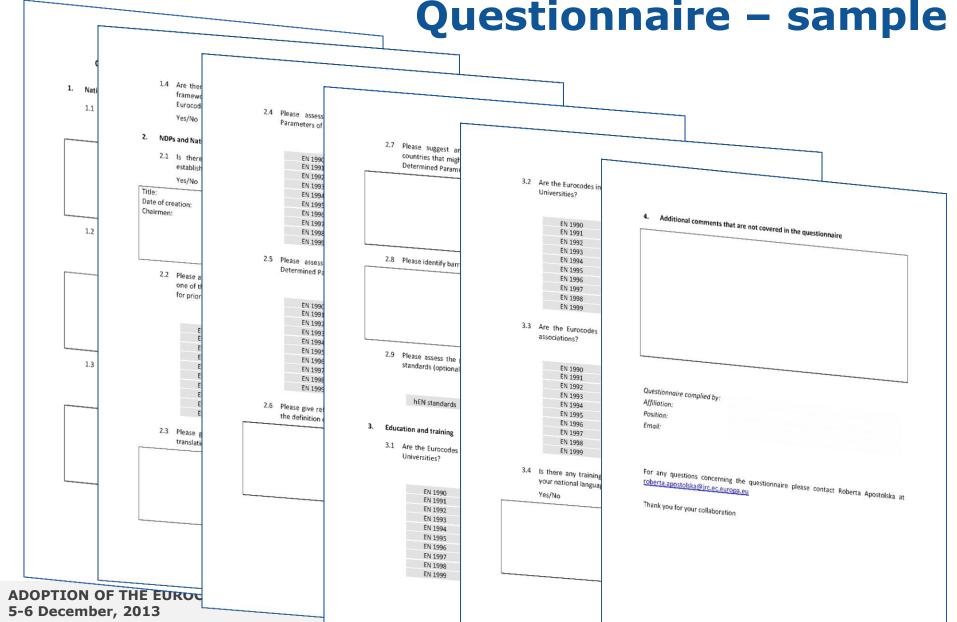
- Inclusion of Eurocodes in **Bachelor study**
- Inclusion of Eurocodes in Master study
- Inclusion of Eurocodes in training courses
- Training materials in national language

Additional comments





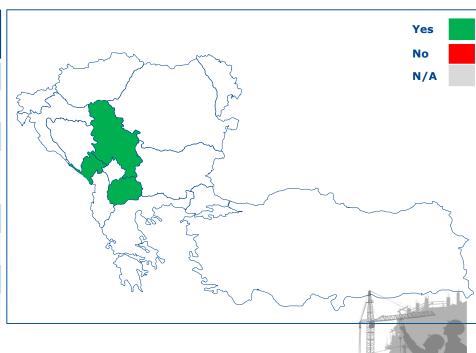
Questionnaire - sample





NATIONAL REGULATORY FRAMEWORK

1.1 Is there a National Action plan for adoption and implementation of the Eurocodes		
Albania	Strategy report – MPPT	
Bosnia and Herzegovina	No	
Croatia	Eurocodes is already adopted	
the former Yugoslav Republic of Macedonia	Yes	
Moldova	No, initiated by MCDT	
Montenegro	Yes	
Turkey	No, (EC8 included in NSAP)	
Serbia	Yes	



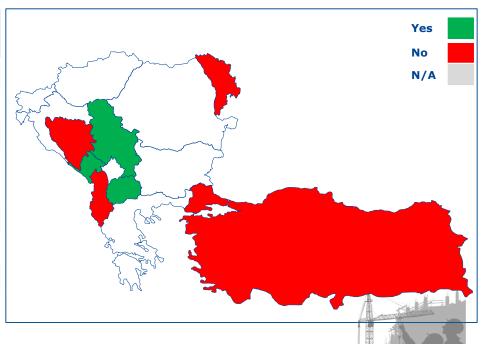


NATIONAL REGULATORY FRAMEWORK

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Moldova	No, initiated by MCDT	
Montenegro	Yes	

No, (EC8 included in NSAP)



Yes

Turkey

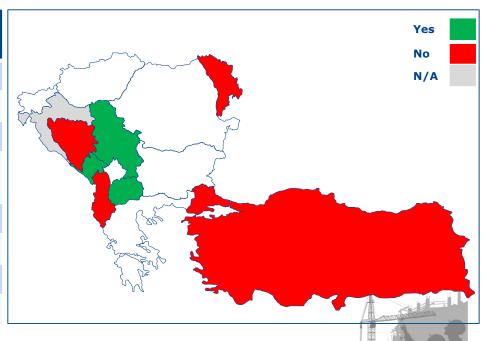
Serbia



NATIONAL REGULATORY FRAMEWORK

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Albania	Strategy report - MDDT

Albania	Strategy report – MPPT
Bosnia and Herzegovina	No
Croatia	Eurocodes is already adopted
the former Yugoslav Republic of Macedonia	Yes
Moldova	No, initiated by MCDT
Montenegro	Yes
Turkey	No, (EC8 included in NSAP)
Serbia	Yes

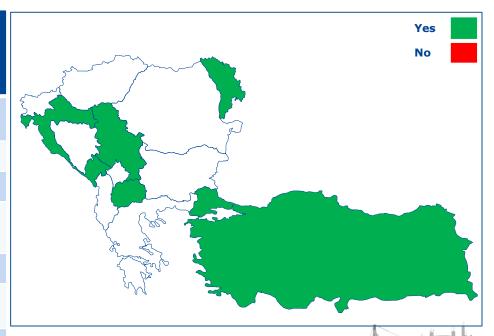




NATIONAL REGULATORY FRAMEWORK

1.2 In the case that Eurocodes are adopted as national standards, are they going to be used as primary standards or in parallel with no contradictory existing national standards

contradictory existin	contradictory existing national standards		
Albania	EN1990, EN1991, EN1992 & EN1998 to be used in parallel		
Bosnia and Herzegovina	In parallel		
Croatia	As primary standards		
the former Yugoslav Republic of Macedonia	As primary standards		
Moldova	As primary standards		
Montenegro	As primary standards but after 2-4 years coexistence		
Turkey	As primary standards (under some conditions)		
Serbia	As primary standards		



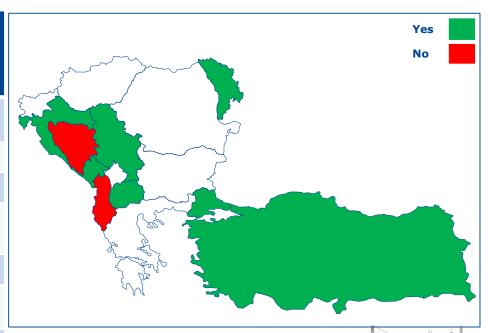




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Moldova	As primary standards
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Turkey	As primary standards (under some conditions)
Serbia	As primary standards



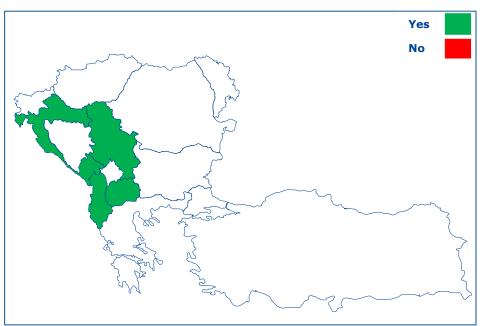




NATIONAL REGULATORY FRAMEWORK

1.3 Does any relevant national institution support projects for A/I of Eurocodes? If yes, please give information and reference to any project financed by EU

project illianced by Eo		
Albania	GDS (NSB)	
Bosnia and Herzegovina	No	
Croatia	MGIPIU (NA), HZN (NSB) & Croatian Chamber of Civil Engineers	
the former Yugoslav Republic of Macedonia	ISRM (NSB), Chamber of authorized architects and engineers/TAIEX, IPA and GTZ support	
Moldova	No	
Montenegro	Twinning project/EU-IPA	
Turkey	No	
Serbia	Academia and ISS (NSB)/GTZ and DIN support	



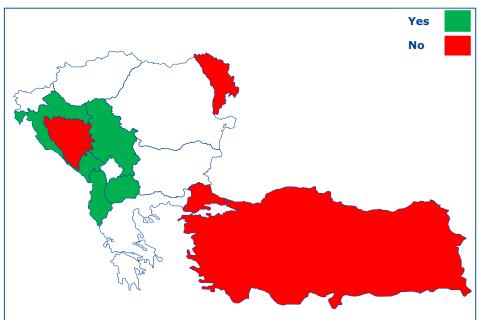




NATIONAL REGULATORY FRAMEWORK

1.3 Does any relevant national institution support projects for A/I of Eurocodes? If yes, please give information and reference to any project financed by EU

project financed by EU		
Albania	GDS (NSB)	
Bosnia and Herzegovina	No	
Croatia	MGIPIU, HZN (NSB) & Chamber of Civil Engineers (national)	
the former Yugoslav Republic of Macedonia	ISRM (NSB), Chamber of authorized architects and engineers/TAIEX, IPA and GTZ support	
Moldova	No	
Montenegro	Twinning project/EU-IPA	
Turkey	No	
Serbia	Academia and ISS (NSB)/GTZ	



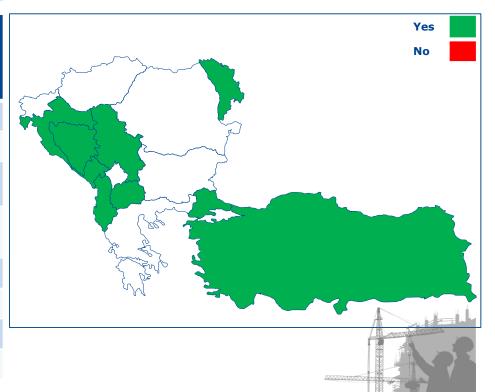




NATIONAL REGULATORY FRAMEWORK

1.4 Are there needs for harmonization of
national legislation and standardisation
framework for construction with EU
legislation

legislation	
Albania	Yes
Bosnia and Herzegovina	Yes
Croatia	Yes, scale of harmonization is yet to be determined
the former Yugoslav Republic of Macedonia	Yes
Moldova	Yes
Montenegro	Yes
Turkey	Yes
Serbia	Yes





NDPs and NATIONAL ANNEXES & HARMONIZATION

2.1 Is there a Technical Committee for adoption of the Eurocodes already established		
Albania	YES	KT 250 Eurocode (2007)/Chairman - Mr F. Kadiu
Bosnia and Herzegovina	NO	BAS/TC 58 (to be set up)
Croatia	YES	HZN/TO 548 Structural Eurocodes (2006)/Chairman - Mr I. Dzeba
the former Yugoslav Republic of Macedonia	YES	ISRM TC 40 Eurocodes and National Annexes (2012)/ Chairman - Mr T. Delipetrov; (ISRM TC 30: 2007-2012)
Moldova	NO	
Montenegro	YES	ISME/TK 002 Eurocodes (2011)/Chairman - Mr R. Zejak
Turkey	YES	TSI – Safety of construction
Serbia	YES	KS U250 - 1,8 (2012)/Chairman - Mr Gj. Vuksanovic KS U250 - 3,6,9 (2006)/ Chairman - Mr Z. Markovic KS U250 - 2 (to be set up)/Chairman - Mr D. Najdanovic

KS U250 - 5,6 (2011)/Chairman - Mr B. Stefanofic

KS U182 Geotechnics/Chairman - Mr L. Caki



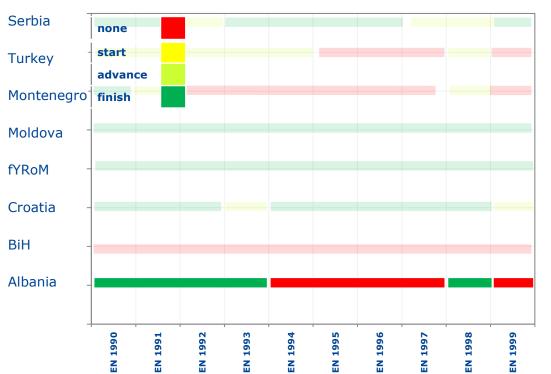
NDPs and NATIONAL ANNEXES & HARMONIZATION

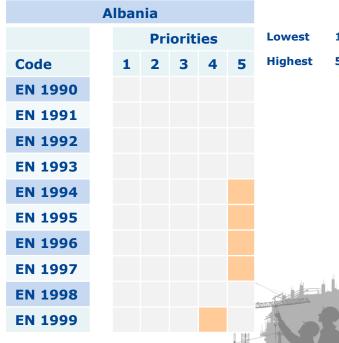






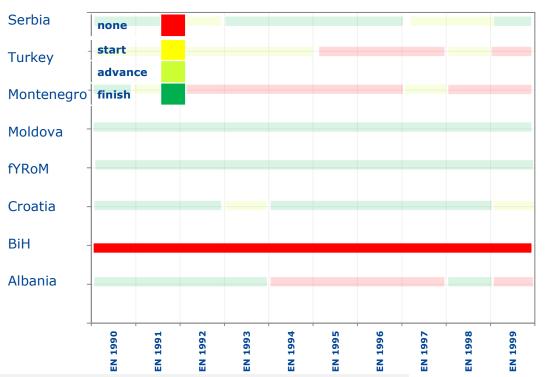
NDPs and NATIONAL ANNEXES & HARMONIZATION







NDPs and NATIONAL ANNEXES & HARMONIZATION







NDPs and NATIONAL ANNEXES & HARMONIZATION

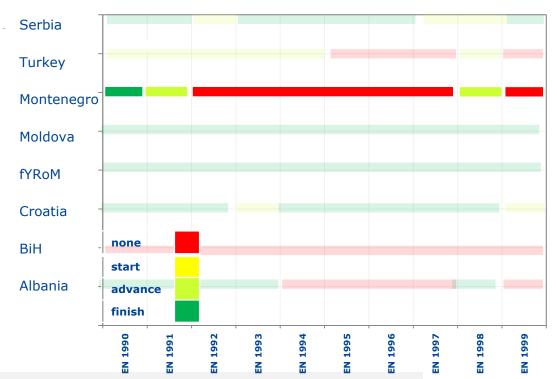






NDPs and NATIONAL ANNEXES & HARMONIZATION

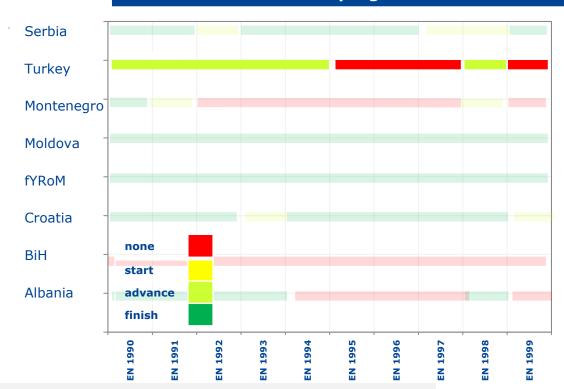
2.2 Please assess the progress of translation of each Eurocode/priorities







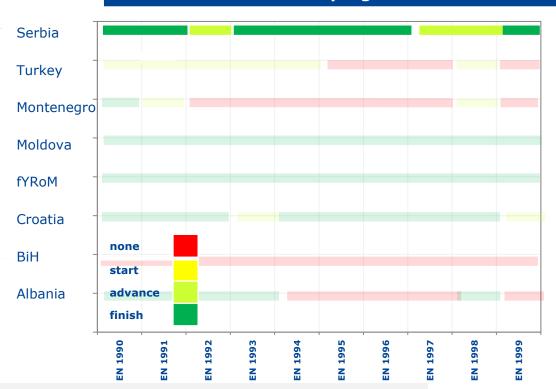
NDPs and NATIONAL ANNEXES & HARMONIZATION







NDPs and NATIONAL ANNEXES & HARMONIZATION







NDPs and NATIONAL ANNEXES & HARMONIZATION

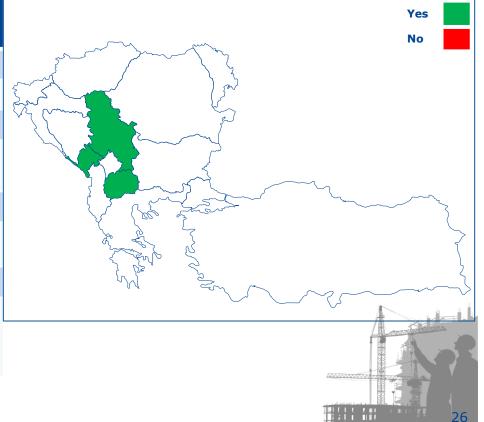
in the process of translation of the Eurocodes?			
Albania	No		
Bosnia and Herzegovina	No		
Croatia	No		
the former Yugoslav Republic of Macedonia	Yes, with the Institute for standardization of Serbia		
Moldova	No		
Montenegro	Yes, with the Institute for standardization of Serbia		
Turkey	No		

Yes, with Institutes for

Standardization of fYRoM and Montenegro (Eurocodes translated

in Serbian were delivered)

2.3 Is there any existing regional cooperation



ADOPTION OF THE EUROCODES IN THE BALKAN REGION 5-6 December, 2013

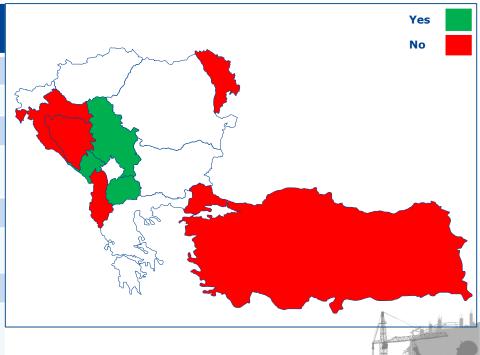
Serbia



NDPs and NATIONAL ANNEXES & HARMONIZATION

2.3 Is there any existing regional cooperation in the process of translation of the Eurocodes?			
Albania	No		

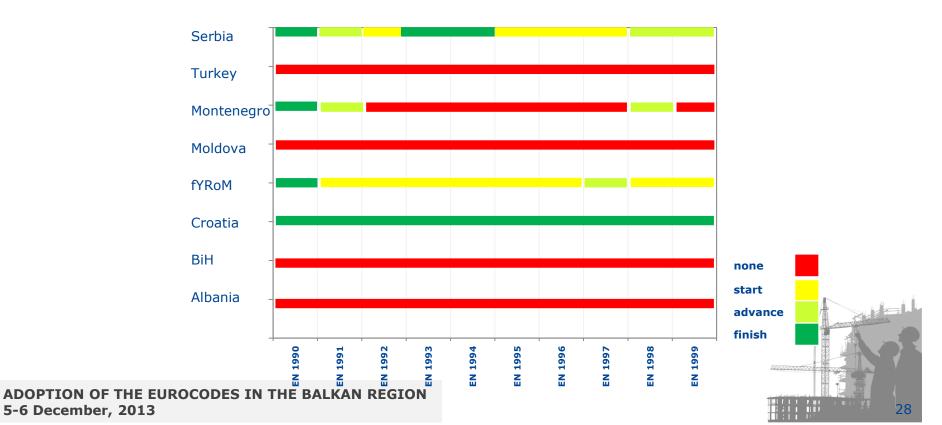
and the second of the second o	
Albania	No
Bosnia and Herzegovina	No
Croatia	No
the former Yugoslav Republic of Macedonia	Yes, with the Institute for standardization of Serbia
Moldova	No
Montenegro	Yes, with the Institute for standardization of Serbia
Turkey	No
Serbia	Yes, with Institutes for Standardization of fYRoM and Montenegro (Eurocodes translated in Serbian were delivered)





NDPs and NATIONAL ANNEXES & HARMONIZATION

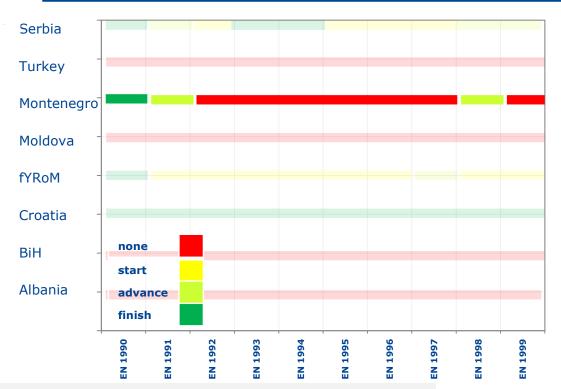
2.4 Please assess the progress of definition of the NDPs of each Eurocode

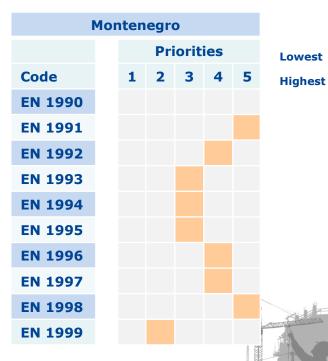




NDPs and NATIONAL ANNEXES & HARMONIZATION

2.4 Please assess the progress of definition of the NDPs of each Eurocode/priorities







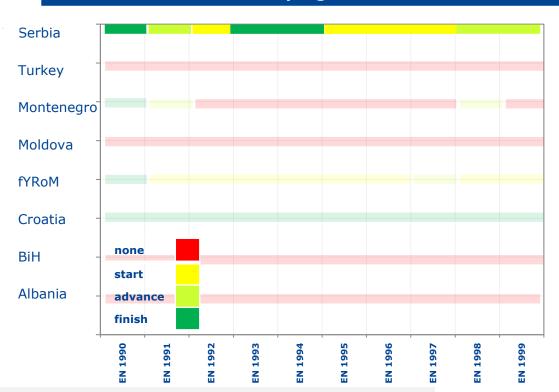
Lowest

Highest

Questionnaire – data analysis

NDPs and NATIONAL ANNEXES & HARMONIZATION

2.4 Please assess the progress of definition of the NDPs of each Eurocode/priorities







NDPs and NATIONAL ANNEXES & HARMONIZATION

2.5 Please assess the proportion of the recommended values of NDPs of each Eurocode that have been/will be accepted



Croatia	
Code	[%]
EN 1990	74
EN 1991	94
EN 1992	98
EN 1993	95
EN 1994	78
EN 1995	63
EN 1996	82
EN 1997	48
EN 1998	70
EN 1999	100



NDPs and NATIONAL ANNEXES & HARMONIZATION

2.6 & 2.7 Regional cooperation and/or on-going projects for the definition of the NDPs

EXISTING

Albania	No
Bosnia and Herzegovina	No
Croatia	No
the former Yugoslav Republic of Macedonia	No
Moldova	No
Montenegro	No
Turkey	No
Serbia	Yes (ISRM)





NDPs and NATIONAL ANNEXES & HARMONIZATION

2.6 & 2.7 Regional cooperation and/or on-going projects for the definition of the NDPs

	EXISTING	FORESEEN
Albania	No	Kosovo and fYRoM
Bosnia and Herzegovina	No	NSBs in the region
Croatia	No	Neighbouring countries and fYRoM
the former Yugoslav Republic of Macedonia		NSBs in Serbia, Bulgaria and Slovenia
Moldova		NSB of Romania
Montenegro		NSBs in fYRoM, Serbia and BiH
Turkey		IZIIS (MK), UP (Greece), UTCB (Romania) and UACG (Bulgaria)
Serbia	Yes (ISRM)	NSBs, faculties, meteorological and seismological institutes



NDPs and NATIONAL ANNEXES & HARMONIZATION

2.8 Identify barriers for the elaboration of the National Annexes

Albania

- Time limitation
- Technical knowledge
- Administrative barriers

BiH

- Legal framework
- Elaboration of the maps for: snow, wind, earthquake

Croatia

 N/A (possible barrier might be absence of national experience in some fields)

fYRoM

Absence of necessary funds

Montenegro

 Lack of financial means for translation of Eurocodes, for elaboration of NA, for scientific research, meetings

Moldova

 Insufficient experience/specialists

Turkey

- Lack of sufficient resources for research
- Lack of sufficient demand from practitioners

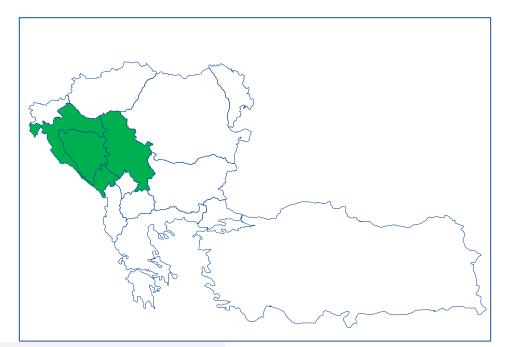
Serbia

- Adjustment of elaborated snow, wind, temperature and seismic maps in digital format
- More active engage of national experts



NDPs and NATIONAL ANNEXES & HARMONIZATION

2.9 Please assess the progress of adoption of Eurocodes related harmonized EN standards



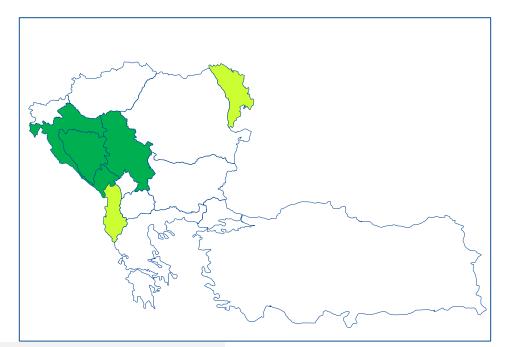






NDPs and NATIONAL ANNEXES & HARMONIZATION

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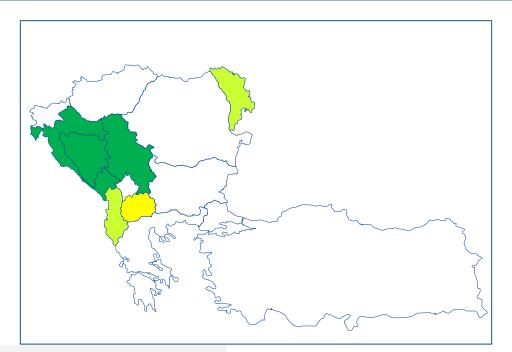






NDPs and NATIONAL ANNEXES & HARMONIZATION

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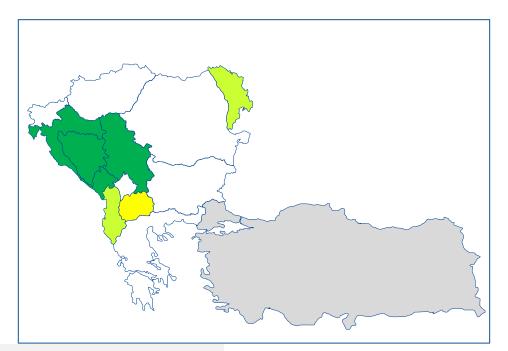






NDPs and NATIONAL ANNEXES & HARMONIZATION

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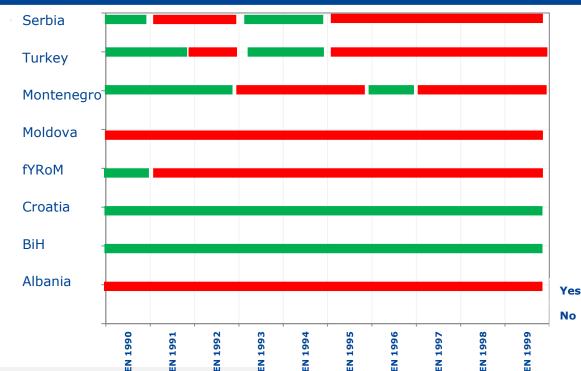






EDUCATION AND TRAINING

3.1 Are the Eurocodes included in the first cycle study (Bachelor) curriculum at the Universities?

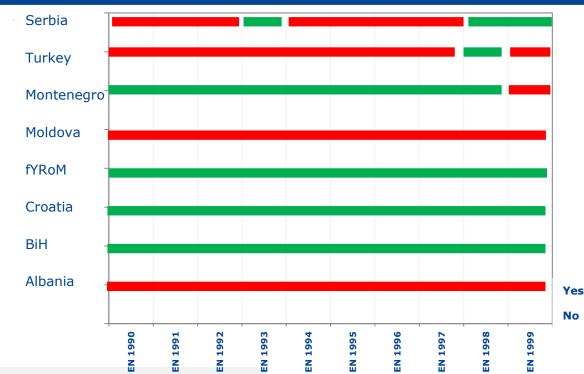






EDUCATION AND TRAINING

3.2 Are the Eurocodes included in the second cycle study (Master) curriculum at the Universities?

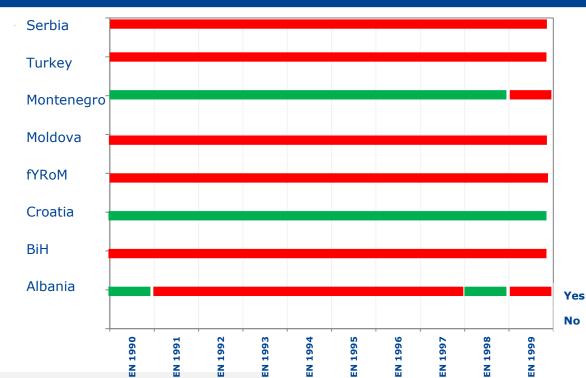






EDUCATION AND TRAINING

3.3 Are the Eurocodes included in the training courses offered by professional associations?

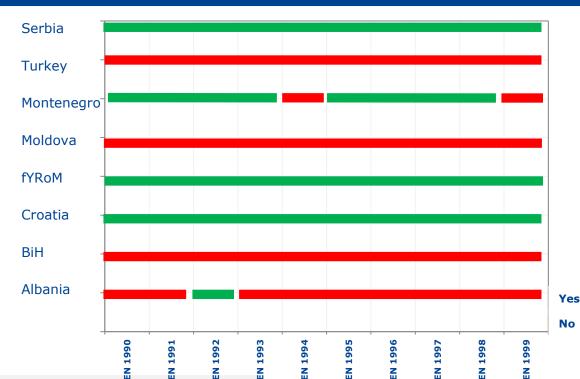






EDUCATION AND TRAINING

3.4 Are there any training material (booklets, leaflets, guidelines etc.) available on each country national language?







ADDITIONAL COMMENTS THAT ARE NOT COVER IN THE QUESTIONNAIRE

Albania

Component 3: Building Code Development

AL-DRMAP

Ministry of Interior & Ministry of public works and transport

SEE - DRMAP WB & UN ISDR



ADDITIONAL COMMENTS THAT ARE NOT COVER IN THE QUESTIONNAIRE

FYROM

Experts participation in Evolution Groups of the CEN TC250/SC7

Participation on seminars and workshops

- * Eurocodes-Background and applications, 2008
- * MASE -2007,2011
- * MAG 2008

Past cooperation with relevant national stakeholders





ADDITIONAL COMMENTS THAT ARE NOT COVER IN THE QUESTIONNAIRE

MOLDOVA

 Emphasises a strong need to harmonize Moldovan building regulations and standards with European standards.

MONTENEGRO

• The expected term for adoption and implementation process of the Eurocodes is the end of 2016. A better cooperation with the countries in the region is needed in order to define integral data base on the country borders etc.

SERBIA

• ISS has established cooperation with the Hydro Meteorological and Seismological Institutes of Serbia for drafting NA. These institutes prepared maps of: snow, wind, temperature and seismic actions.



Questionnaire - conclusions (1)

NATIONAL REGULATORY FRAMEWORK

- 1.1 Is there a National Action plan for adoption and implementation of the Eurocodes?
- 1.2 In the case that Eurocodes are adopted as national standards, are they going to be used as primary standards?
- 1.3 Does any relevant national institution support projects for adoption and implementation of the Eurocodes?
- 1.4 Are there needs for harmonization of national legislation and standardization framework for construction?

Yes, in fYRoM, Montenegro and Serbia. N/A for Croatia.

They will be used as primary standards in: Croatia, fYRoM Moldova, Montenegro, Serbia and Turkey, (EN 1990, EN 1991 and EN 1997).

Yes, there is national support for adoption and implementation in Albania, Croatia, fYRoM, Montenegro and Serbia.

Yes.



Questionnaire - conclusions (2)

NDPs and NATIONAL ANNEXES & HARMONIZATION

2.1 Is there a Technical Committee for adoption of the Eurocodes already set?

2.2 Please assess the progress of translation of each Eurocode?

2.3 Is there any existing regional cooperation in the process of translation of the Eurocodes?

2.4 Please assess the progress of definition of NDPs for each Eurocode?

Yes, in Albania, Croatia, fYRoM, Montenegro, Serbia and Turkey.

Translation is finished in fYRoM, Moldova, Croatia (except EN 1993 and EN 1999) and Serbia (except EN 1992, EN 1997 and EN 1998).

Yes, fYRoM and Montenegro cooperate with the Institute for standardization from Serbia and Moldova with Romania.

Croatia is the only country which has completed the process. In BiH, Moldova, Turkey and Albania (except EN 1998), the process has not starting yet.



Questionnaire – conclusions (3)

NDPs and NATIONAL ANNEXES & HARMONIZATION

2.5 Please assess the proportion of the recommended values of NDPs that have been/will be accepted?

2.6& 2.7 Is there any existing/foreseen regional cooperation for the definition of NDPs?

2.8 Please identify the barriers for elaboration of the NA, if any?

2.9 Please assess the progress of adoption of Eurocodes related harmonized EN standards?

Croatia, Montenegro and Serbia have more than 75% of acceptance for more than 6 Eurocodes.

Not existing. Foreseen-in general all countries mainly refer to NSBs in their neighboring countries, as well as faculties and institutes.

Yes, there are. In general: lack of resources (e.g. for elaboration of maps); legal framework; insufficient experience and specialists etc.

In the advanced phase adopted in Croatia, BiH, Montenegro and Serbia.



Questionnaire - conclusions (4)

EDUCATION AND TRAINING

- 3.1 Are the Eurocodes included in the first study cycle (Bachelor) curriculum at the Universities?
- 3.2 Are the Eurocodes included in the second study cycle (Master) curriculum at the Universities?
- 3.3 Are the Eurocodes included in the training courses offered by professional associations?
- 3.4 Is there any training material available on each country national language?

BiH and Croatia completely include the Eurocodes in the first study cycle. Albania and Moldova not include at all.

BiH, Croatia, fYRoM and Montenegro (except EN 1999) completely include the Eurocodes in the second study cycle.

Training courses are offered in Croatia, Montenegro (except EN 1999) and Albania (only EN 1990 and EN 1998).

There is in Croatia, fYRoM, Montenegro (except EN 1994 and EN 1999) and Serbia.



General conclusions

- Most of the non-EU countries in the Balkan region are going to use Eurocodes as primary standards. They are aware about needs for harmonization of national legislation and standardization framework for construction with EU legislation. However, in most of the countries there is a lack of relevant institutional support for adoption and implementation of the Eurocodes.
- □ There is good progress on Eurocodes translations, especially on EN 1990, EN 1991 and EN 1992. This process is completed in fYRoM, Croatia and Moldova and in very advanced phase in Serbia. The process of elaboration of NDPs and NA has started in majority of countries (in Croatia it is already finished).
- Eurocodes are included in higher education; more extensively in the second cycle (Master courses). In general, training courses are not offered by professional associations (except in Croatia and Montenegro) and there is lack of comprehensive training material. The financing at National level for the elaboration of guidelines for application of EN Eurocodes and design aids is insufficient.



Thank you for your attention

http://eurocodes.jrc.ec.europa.eu

