

"The way forward for the Eurocodes implementation in the Balkans"

10-11 October 2018, Tirana

The state of Eurocodes implementation in the non-EU Balkan countries – summary of questionnaires and country reports

Roberta Apostolska

**Institute of Earthquake Engineering and
Engineering Seismology - IZIIS**

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Skopje**

Outline

❑ Previous activities

- Workshop “Adoption of the Eurocodes in the Balkan region”, Milan, 2013
- Workshop “Building capacities for elaboration of NDPs and NAs of the Eurocodes in the Balkan region”, Skopje, 2014
- Workshop “Elaboration of maps for climatic and seismic actions for structural design in the Balkan Region”, Zagreb, 2015
- CEN side-event: “Current status of the Eurocodes in the Balkan Region”, Skopje, 2016

❑ **Follow-up activity “The way forward for the Eurocodes implementation in the Balkans”, Tirana, 2018**

Participants: 51



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**





Participants: 49



BUILDING CAPACITIES FOR
ELABORATION OF **NDPs** AND **NAs**
OF THE **EUROCODES** IN
THE **BALKAN** REGION

4-5 November 2014
Skopje, the former Yugoslav Republic of Macedonia

Organized by
EUROPEAN COMMISSION - DG Joint Research Centre

Hosted by
Standardization Institute of the Republic of Macedonia

Supported by
EUROPEAN COMMISSION
JRC **Enlargement and Integration Action**



Participants: 45



ELABORATION OF **MAPS** FOR
CLIMATIC AND **SEISMIC** ACTIONS
FOR STRUCTURAL DESIGN
IN THE **BALKAN** REGION


27 - 28 October 2015
Zagreb, Croatia

Organised by
EUROPEAN COMMISSION - DG Joint Research Centre

Supported by
EUROPEAN COMMISSION
JRC **Enlargement and Integration Action**
CEN/TC250
UNIVERSITY OF ZAGREB, Croatia
CROATIAN STANDARDS INSTITUTE



Participants: 36



CURRENT STATUS OF THE **EUROCODES**
IN THE **BALKAN** REGION
Side-event to the 12th annual meeting of
CEN&CENELEC

9 June 2016
Skopje, the former Yugoslav Republic of Macedonia

Locally organized by
**INSTITUTE OF EARTHQUAKE ENGINEERING AND
ENGINEERING SEISMOLOGY (IZIIS)**, Skopje
SS. CYRIL AND METHODIUS UNIVERSITY, Skopje

Co-organized by
EUROPEAN COMMISSION - DG Joint Research Centre
CEN - CENELEC





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

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JRC **Enlargement and Integration Action**



Focus and conclusion (s) - 2013

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

The **important conclusion** was that most of the non-EU countries in the Balkan region **are planning to use the Eurocodes as primary standards**. There was also good progress on Eurocodes translations, especially on EN 1990, EN 1991 and EN 1992. However the process of elaboration of Nationally Determined Parameters (NDPs) and National Annexes (NA) was in the initial phase. In most of the countries there was a lack of relevant institutional support for adoption and implementation of the Eurocodes, so creating a regional platform for collaboration was pointed as one of the drivers in the process.



BUILDING CAPACITIES FOR
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Joint
Research
Centre



Focus and conclusion (s) - 2014

The main goal was to assess recent progress, difficulties and needs for the **definition of the NDPs and NAs** since the first workshop held in 2013, and to boost regional collaboration for cross-border harmonization of NDPs (Apostolska et al., 2014).

Based on compiled questionnaires and country report presentations delivered at the workshop **significant progress of definition of NDPs was observed.** Most non-EU countries in the Balkan region (except Bosnia and Herzegovina and Turkey) had started with the definition of NDPs. Albania and Serbia were the most advanced with around 60% of NDPs already defined. The former Yugoslav Republic of Macedonia reported that 71% of NAs are in the phase of public enquiry. The average percentage of acceptance of the recommended values for the NDPs that have been already defined was more than 80%. This percentage is in line with the average of 73% acceptance calculated for the EU Member States and based on the uploaded 67.8% of NDPs in the JRC Eurocodes NDPs database (data refers to 22 April, 2016).

"The way forward for the Eurocodes implementation in the Balkans", 10-11 October 2018, Tirana



ELABORATION OF **MAPS** FOR
CLIMATIC AND **SEISMIC** ACTIONS
FOR STRUCTURAL DESIGN
IN THE **BALKAN REGION**

27 - 28 October 2015
Zagreb, Croatia

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Supported by
EUROPEAN COMMISSION
JRC Enlargement and Integration Action
CEN/TC250
UNIVERSITY OF ZAGREB, Croatia
CROATIAN STANDARDS INSTITUTE



Focus and conclusion (s) - 2015

The Workshop was aimed at further adoption and implementation of the Eurocodes in the non-EU countries in the Balkan region and in particular to strengthen the capacities of stakeholders for the **elaboration of maps for climatic and seismic actions**. The main conclusion was that the elaboration of seismic hazard maps was in the advanced phase while the elaboration of maps for climatic actions is lagging behind mainly due to insufficient data being available.

The process of publication of **NAs to the EN parts which are relevant to the objectives of the Workshop was in its initial phase in all countries**, except in the former Yugoslav Republic of Macedonia, where all NAs have already been published (the maps will be included by the end of 2016). Montenegro is in an advanced stage also with already elaborated NAs to EN1998-1 and NAs to EN1991-1-3, EN1991-1-4 and EN1991-1-5 foreseen for 2016



Focus and conclusion (s) - 2016

The main objectives of the workshop were to: (1) assess recent progress, difficulties and needs (current status) for adoption and implementation of the Eurocodes in non-EU countries from the Balkan region since the last workshop held in Zagreb on 27-28 October 2015; (2) **explore opportunities to facilitate the process of adoption and implementation of the Eurocodes in the Balkan region** and (3) announce the possibilities DG JRC will offer in opening its research infrastructures to external users linked to the Enlargement and Integration Action of DG JRC.

All countries reported **significant progress in the process of adoption of the Eurocode since the first workshop in Milan (2013)**. Most National Standardisation Bodies have adopted the Eurocodes as standards, in parallel with existing national codes that are part of the National regulatory framework. Also, in most countries practitioners use National codes and Eurocodes in parallel (as long as National regulatory frameworks are respected). **None of the countries have adopted and implemented the Eurocodes in the National regulatory framework.**

Follow-up of the CEN side event, 2016

Roadmap for continuing the activities of promotion of the Eurocodes in the non-EU countries from the Balkan region in 2017 and beyond

National regulatory framework

to facilitate implementation of the Eurocodes in the National regulatory framework

Implementation

to assist the training of practitioners (design engineers) to enable their understanding and use of the Eurocodes in day-to-day design practice

Maintenance and upgrading

to increase awareness of the NAs and NSBs of the need for maintaining the existing Eurocodes and keep pace with the coming-up of a second generation of the Eurocodes



THE WAY FORWARD FOR THE EUROCODES IMPLEMENTATION IN THE BALKANS

10-11 October 2018
Tirana, Albania

Organized by
EUROPEAN COMMISSION - Joint Research Centre

Supported by
EUROPEAN COMMISSION - JRC Enlargement and
Integration Action
EUROPEAN COMMISSION - DG GROW
CEN - CENELEC Management Centre
CEN/TC 250 "Structural Eurocodes"

Hosted by
General Directorate of Standardization of Albania

Participants: 77



About the workshop

The workshop is a two-day training event, including round table discussions, with a two-fold aim:

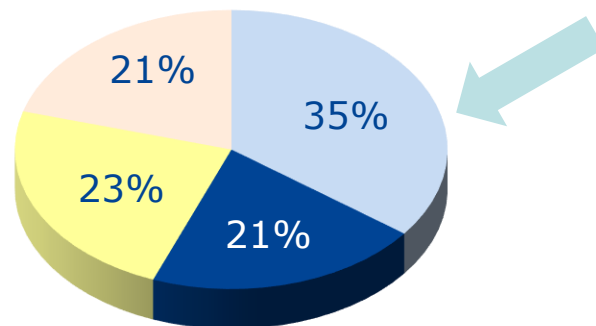
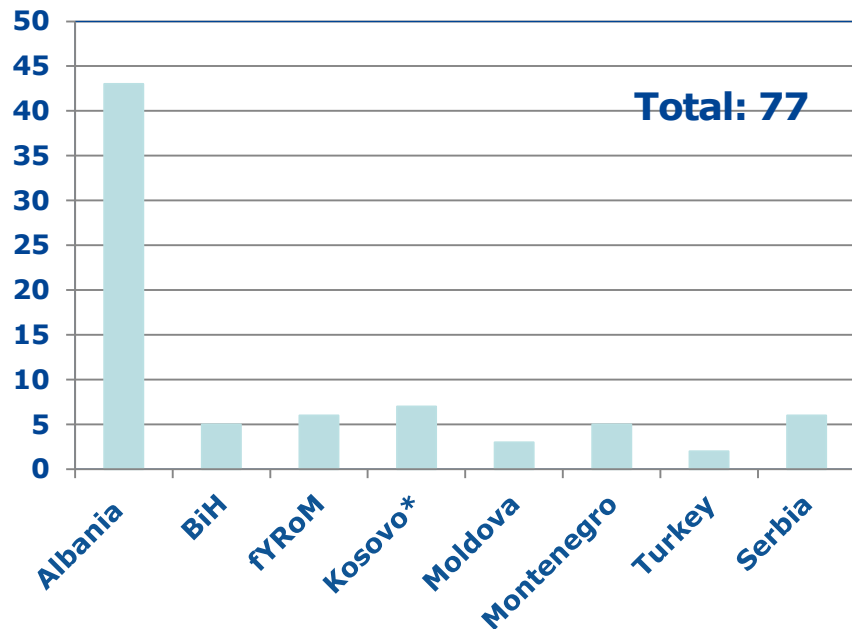
- ❑ Facilitate the implementation of the Eurocodes in the national regulatory framework in the Balkan region
- ❑ Present the concept on a Community of Practice (CoP) related to implementation of Eurocodes in the Balkan region

In particular, the workshop will serve to the following objectives:

- ❑ Assess the level of commitment of the National Authorities in adopting the Eurocodes;
- ❑ Assess the level of harmonization of national policy/legislation with EU regulatory framework;
- ❑ Identify challenges and impediments for the Eurocodes implementation at national regulatory framework level and discuss possible actions;
- ❑ Assess the progress of definition of Nationally Determined Parameters (NDP) and identify needs for (possible) review of already defined NDPs;
- ❑ Facilitate regional cooperation in the Eurocodes implementation;
- ❑ Present case studies of EU countries that have successfully implemented the Eurocodes in the national regulatory framework;
- ❑ Facilitate exchange of views, knowledge and information between EU experts and representatives of non-EU countries in the Balkan region.

Participants from non EU Balkan countries (as registered up to 28.09.2018)

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 –

to assess the state of implementation of the EN EUROCODES in the national regulatory framework (NRF)

PART A –

EN EUROCODES PARTS, NDPs and NAs

1. Translation and publishing of Eurocodes
2. Progress of elaboration of NDPs and acceptance of RVs
3. Publishing of NAs

PART B –

EUROCODES IMPLEMENTATION IN NRF

1. Eurocodes in NRF
2. Eurocodes in public procurements/categories of structures
3. Obligatory use of any EN part



Albania

Questionnaire – Part A

Progress of translation of the Eurocodes and publishing as national standards									
EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓	✓	✓	✓		✓	✓	✓	

Progress of translation of the Eurocodes and publishing as national standards									
EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓	✓	✓	✓		✓	✓	✓	

Progress of translation of the Eurocodes and publishing as national standards									
EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓	✓	✓	✓		✓	✓	✓	
								EN 1998-3	
								EN 1998-5	
								EN 1998-6	

Current progress since 2016

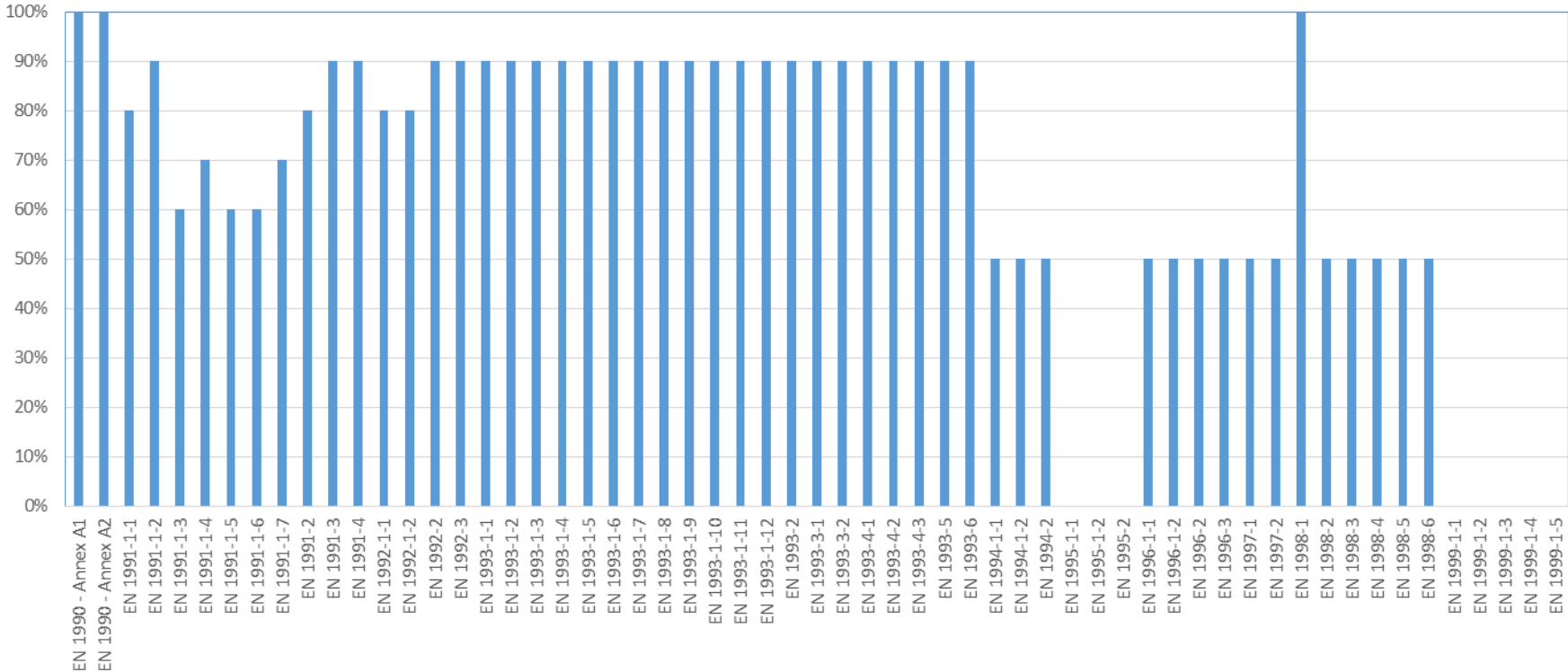
Date of publishing - 2019



Albania

Questionnaire – Part A

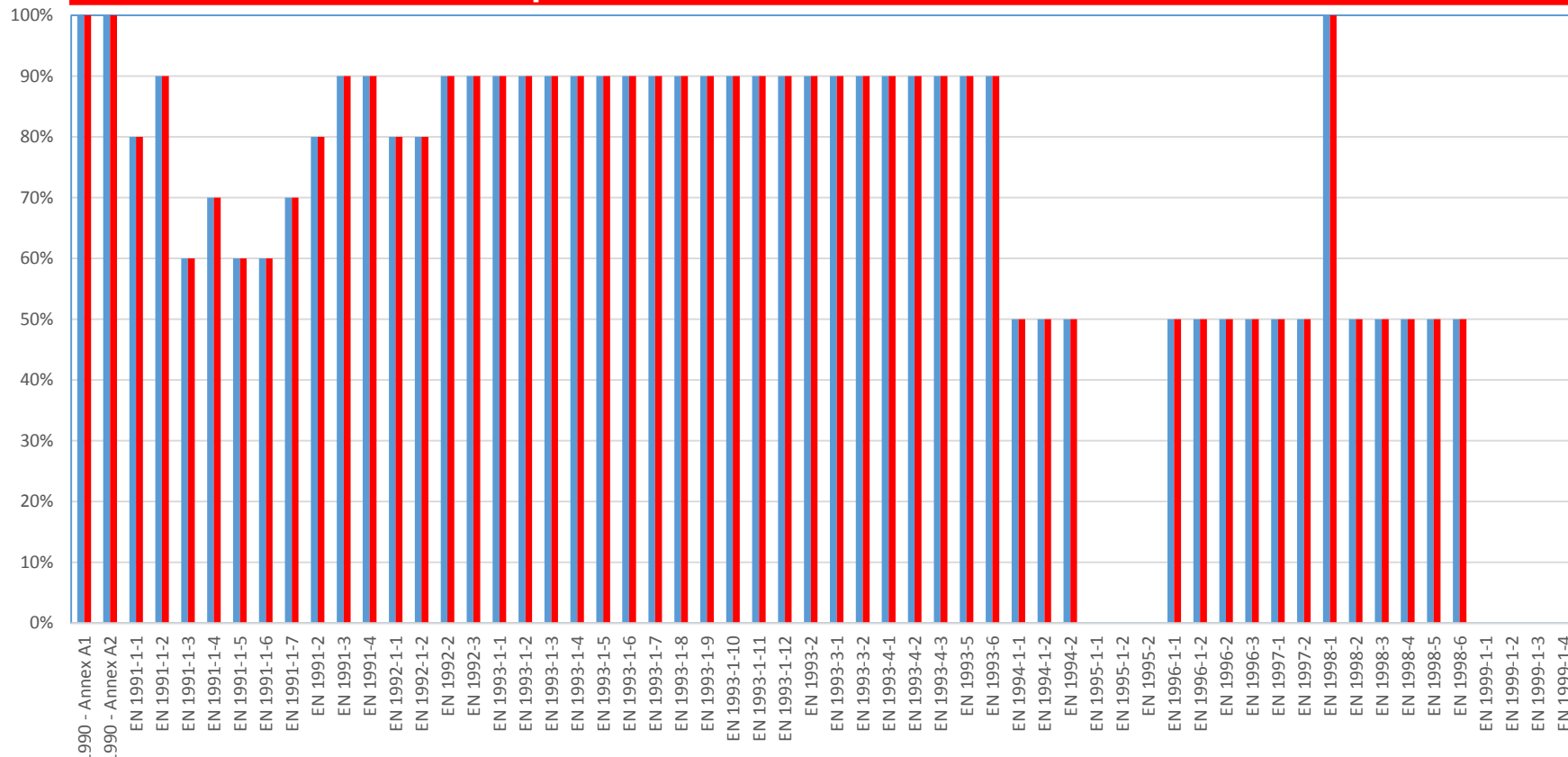
Progress of NDPs definition in %





Progress of NDPs definition in %

Acceptance of RVs for the defined NDPs in %





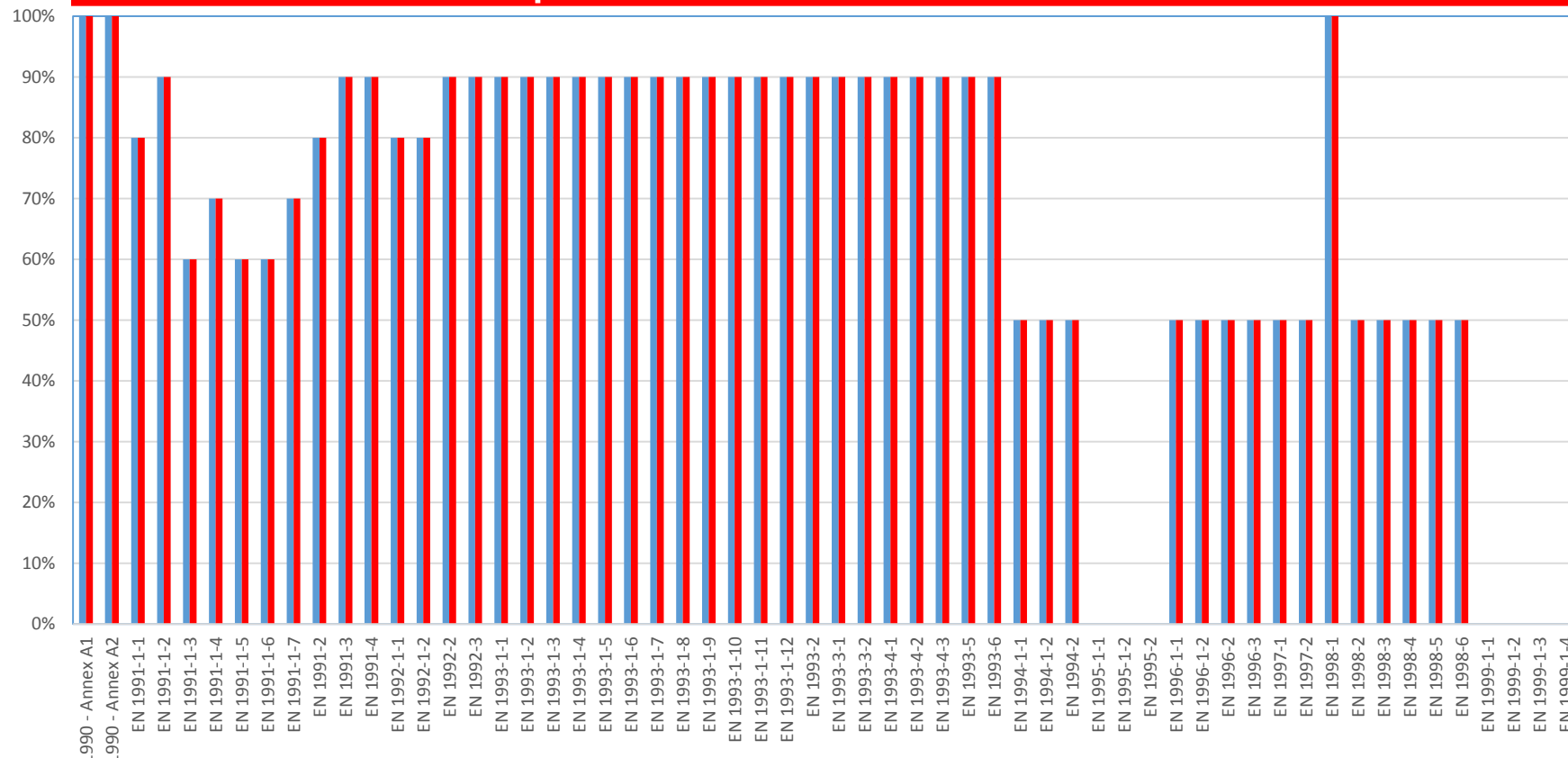
Albania

Questionnaire – Part A

No published NAs

Progress of NDPs definition in %

Acceptance of RVs for the defined NDPs in %





Questionnaire – Part A

Progress of translation of the Eurocodes									
EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Progress of publishing of the Eurocodes as national standards									
EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Progress of publishing National Annexes									
EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓								

EN 1991-1-1

EN 1991-1-2

EN 1991-1-3

EN 1991-1-4

EN 1991-1-5

EN 1998-1

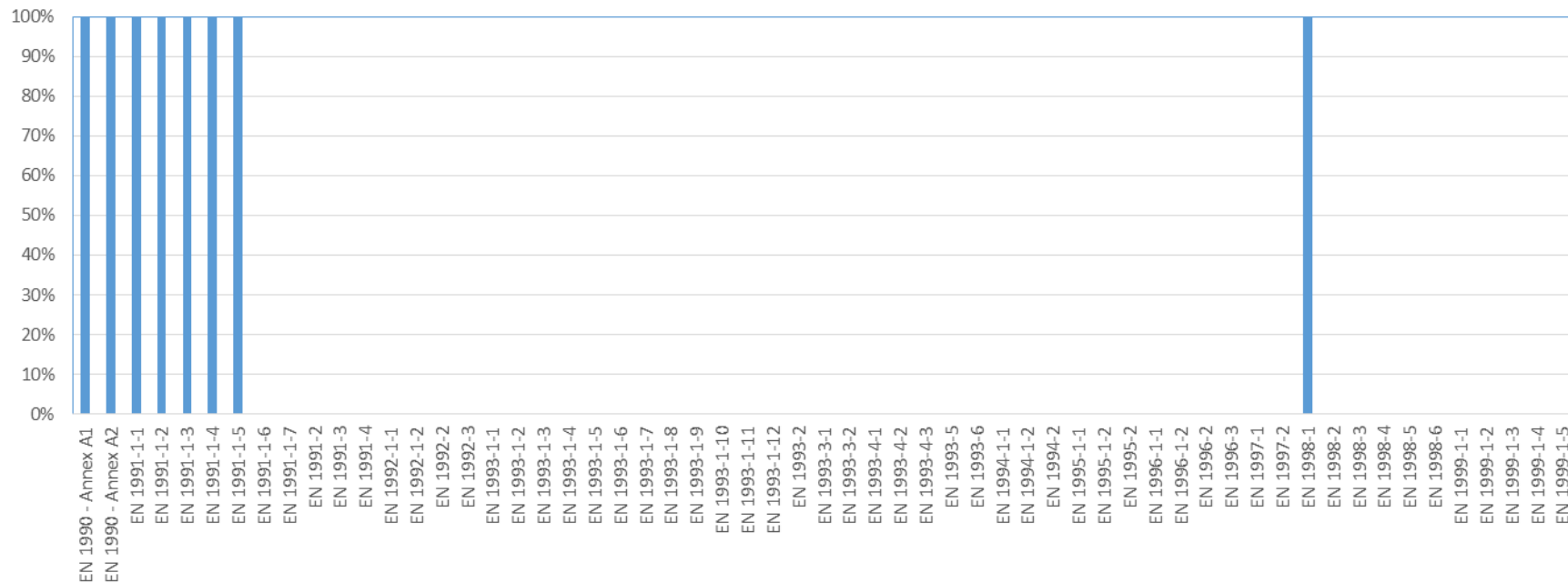
Current progress since 2016

Date of publishing – 2019-2020



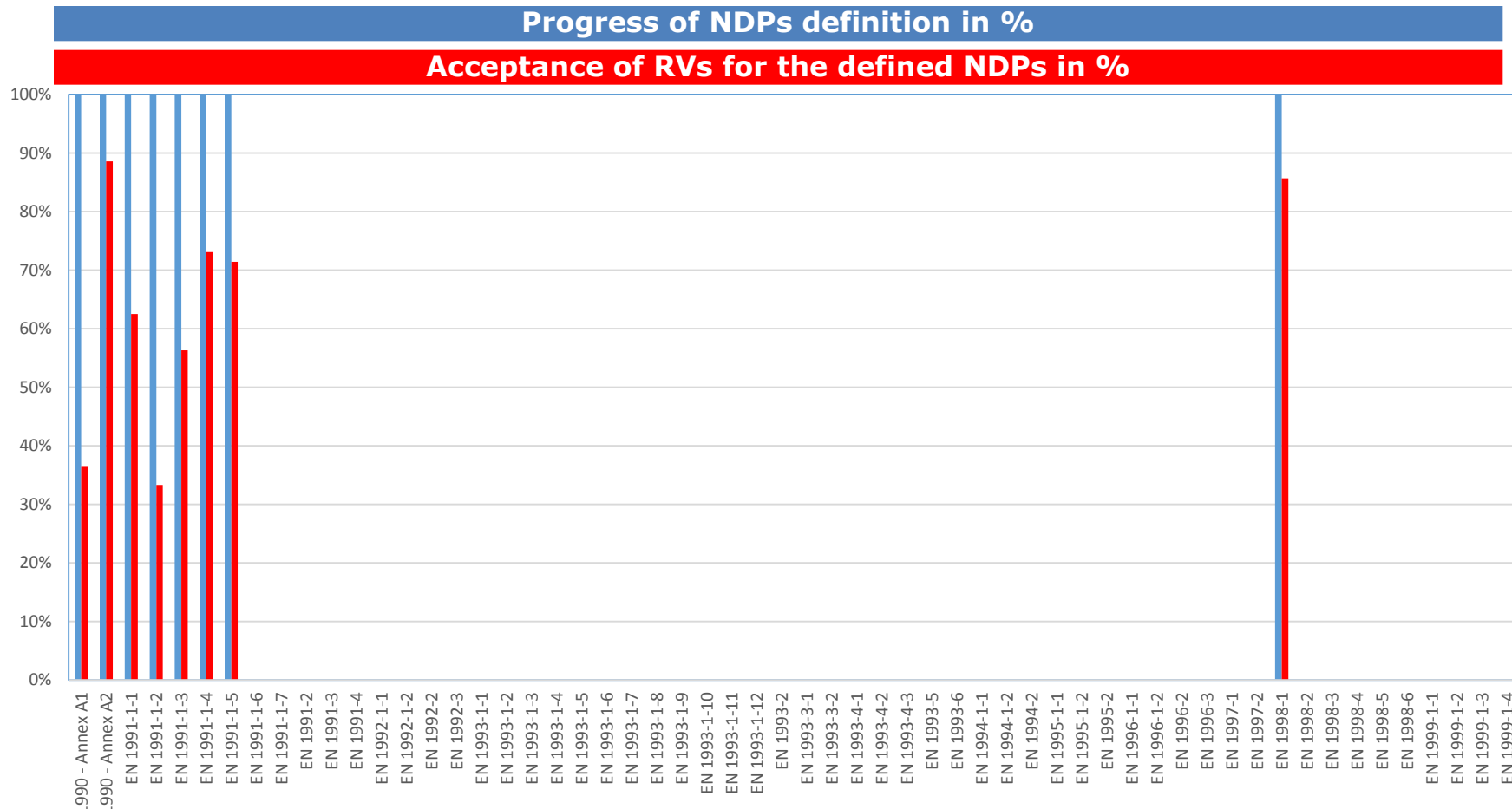
Questionnaire – Part A

Progress of NDPs definition in %





Questionnaire – Part A





Questionnaire – Part A

Progress of translation of the Eurocodes

EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Progress of publishing of the Eurocodes as national standards

EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Progress of publishing National Annexes

EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

EN 1991-1-3

EN 1998-1

Public enquiry

EN 1991-1-4

EN 1991-1-5

Acceptance of RVs for the defined NDPs in %

EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

EN 1990-Annex A1

EN 1990-Annex A2

EN 1991-1-1

around 90%

around 80%



Questionnaire – Part A

Progress of translation of the Eurocodes

EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓	✓	✓						

EN 1998-1
EN 1998-2
EN 1998-5

Progress of publishing of the Eurocodes as national standards

EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

No defined NDPs

No published NAs



Progress of translation of the Eurocodes and publishing as national standards									
EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Progress of definition of NDPs and acceptance of RVs									
EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999

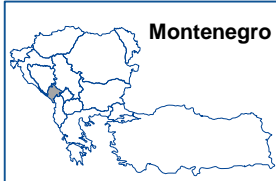
Progress of definition - 100 %	NDPs defined (ref. to CR)
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Acceptance of RVs - 90 %

Progress of publishing National Annexes									
EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓	✓							

Elaborated and Published	Date of publishing – 2019
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Date of publishing – unknow



Progress of publishing of Eurocodes as national standards and publishing of NAs

EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999

EN 1991-3
EN 1991-4

EN 1992-3

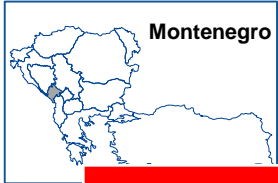
EN 1993-1-3
EN 1993-1-4
EN 1993-1-5
EN 1993-1-6
EN 1993-1-7
EN 1993-1-11
EN 1993-1-12
EN 1993-2
EN 1993-3-1
EN 1993-3-2
EN 1993-4-1
EN 1993-4-2
EN 1993-4-3
EN 1993-5
EN 1993-6

EN 1995-1-2
EN 1995-2

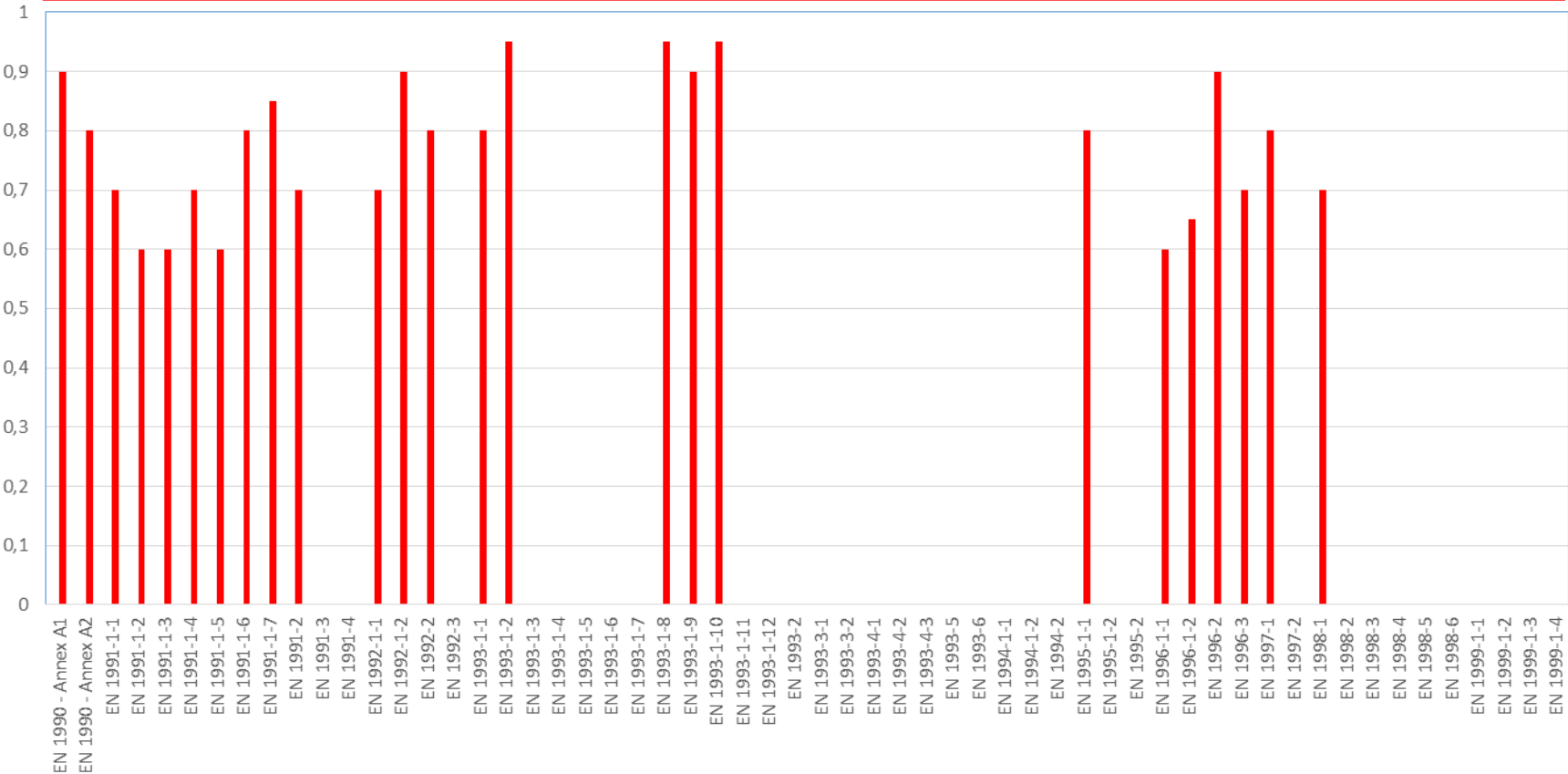
EN 1998-2
EN 1998-3
EN 1998-4
EN 1998-5
EN 1998-6

26 EN Parts translated and NAs published

Date of publishing – end of 2018 and 2019



Acceptance of RVs for the defined NDPs in %



Progress of translation of the Eurocodes

EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999

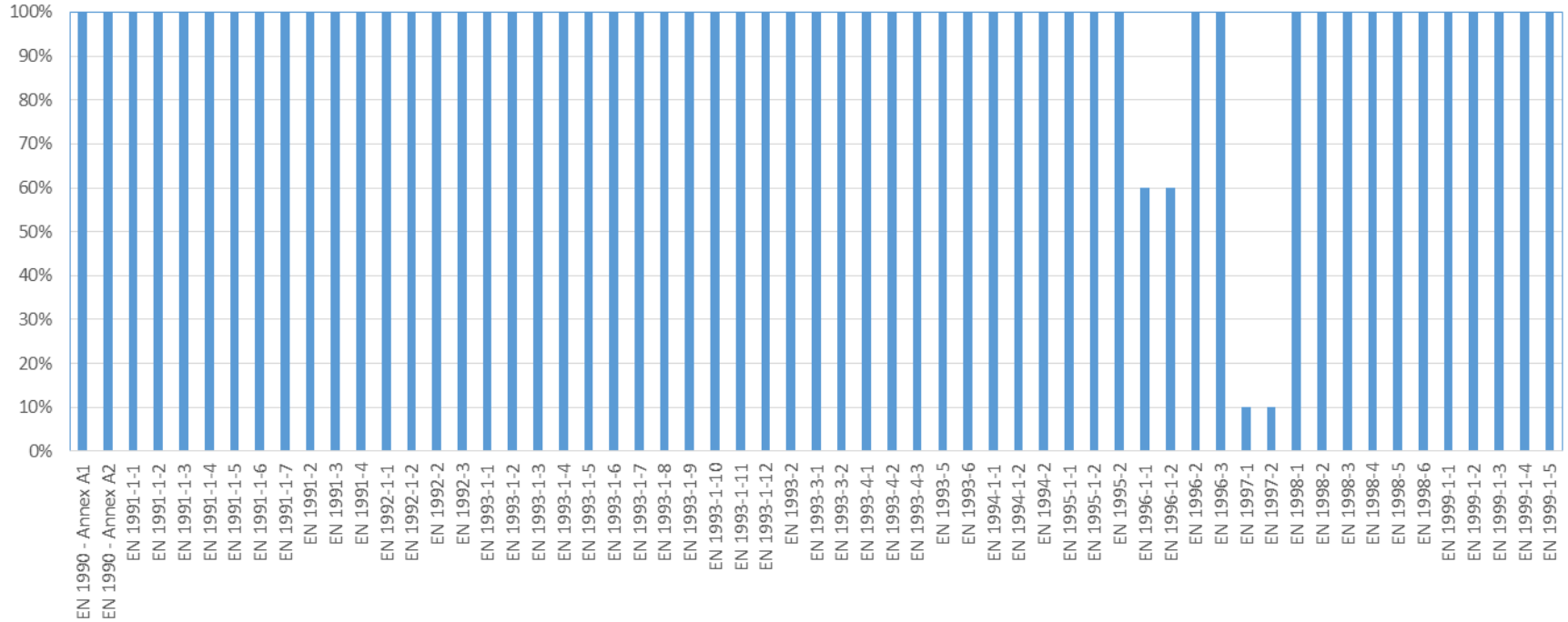
EN 1991	EN 1992	EN 1993	EN 1994	EN 1995	EN 1996
EN 1991-1-1 EN 1991-1-3 EN 1991-1-4 EN 1991-1-5	EN 1992-1-1 EN 1992-3	EN 1993-1-1 EN 1993-1-3 EN 1993-1-5 EN 1993-1-8 EN1993-1-10	EN 1994-1-1	EN 1995-1-1	EN 1996-1-1
4/10	2/4	5/20	1/3	1/3	1/4
27% are translated in Serbian					

Progress of publishing of the Eurocodes as national standards

EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓



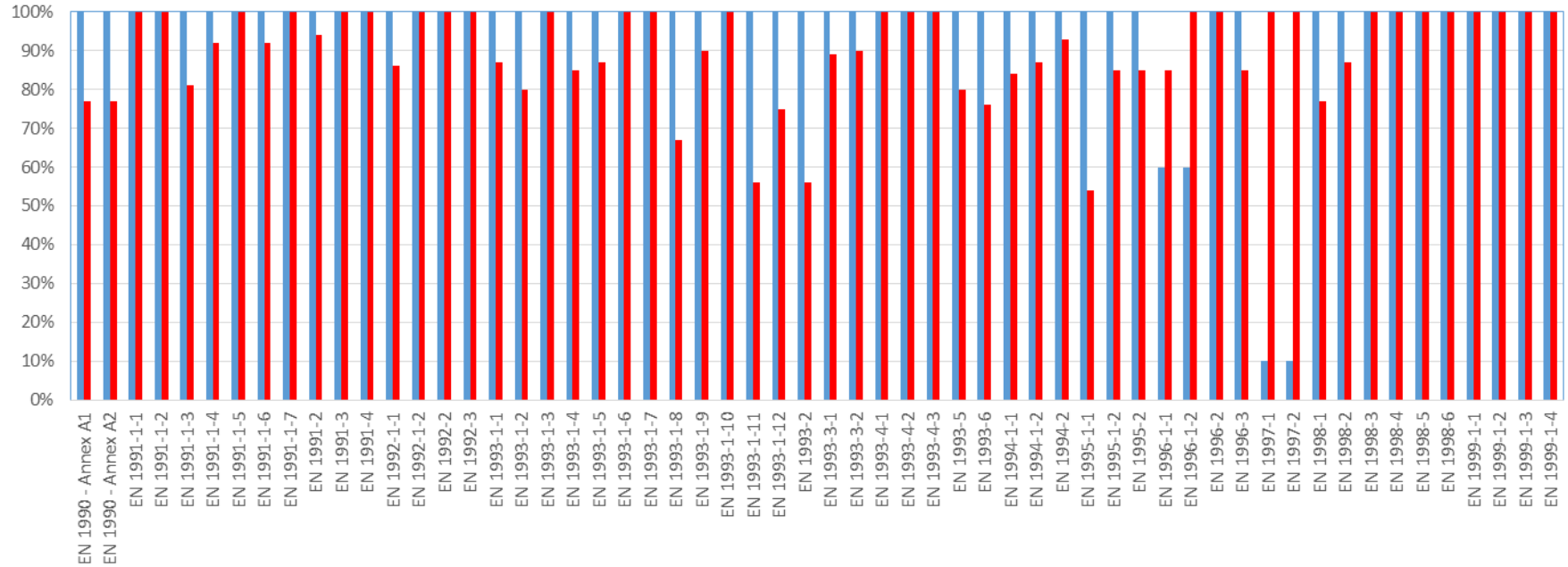
Progress of NDPs definition in %





Progress of NDPs definition in %

Acceptance of RVs for the defined NDPs in %





Progress of publishing National Annexes									
EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓	✓	✓	✓	✓				✓

EN 1991-2

EN 1996-2 (pass ENQ)

EN 1996-3 (pass ENQ)

Date of publishing - 2018

Date of publishing - 2019





Questionnaire – Part A

Progress of translation of the Eurocodes									
EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999

EN 1991	EN 1993	EN 1994	EN 1996	EN 1998
EN 1991-1-1	EN 1993-1-1	EN 1994-1-1	EN 1996-1-1	EN 1998-1
EN 1991-1-2	EN 1993-1-2			EN 1998-2
EN 1991-1-3		1/3	1/4	EN 1998-3
EN 1991-1-4	2/20			EN 1998-5
EN 1991-1-6				
EN1991-1-7				4/6
EN 1991-2				
EN 1991-3				
EN1991-4				
9/10				

44% are translated in Turkish



Questionnaire – Part A

Progress of publishing of the Eurocodes as national standards

EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Progress of definition of NDPs and acceptance of RVs

EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

No defined NDPs

Progress of publishing National Annexes

EN1990	EN1991	EN1992	EN1993	EN1994	EN1995	EN1996	EN1997	EN1998	EN1999

EN 1993-1-1

Date of publishing – unknown

Questionnaire – Part A: Summary

Country	EN part translated	EN part published as NS	Progress of NDPs	Acc. of RVs	NAs published	Comments
Albania	All, except EN1995 and EN1999	All, except EN1995 and EN1999	50%-100%	Same	0	/

Questionnaire – Part A: Summary

Country	EN part translated	EN part published as NS	Progress of NDPs	Acc. of RVs	NAs published	Comments
Albania	All, except EN1995 and EN1999	All, except EN1995 and EN1999	50%-100%	Same	0	/
BiH	100%	100%	All in EN1990, EN1991-1-1 to EN1991-1-5 and EN1998-1	Diff.	8	Networking, Czech Office for standards, metrology and testing

Questionnaire – Part A: Summary

Country	EN part translated	EN part published as NS	Progress of NDPs	Acc. of RVs	NAs published	Comments
Albania	All, except EN1995 and EN1999	All, except EN1995 and EN1999	50%-100%	Same	0	/
BiH	100%	100%	All in EN1990, EN1991-1-1 to EN1991-1-5 and EN1998-1	Diff.	8	Networking, Czech Office for standards, metrology and testing
FYROM	100%	100%	All, except climatic maps	Around 90%	All, except SH and climatic maps	/

Questionnaire – Part A: Summary

Country	EN part translated	EN part published as NS	Progress of NDPs	Acc. of RVs	NAs published	Comments
Albania	All, except EN1995 and EN1999	All, except EN1995 and EN1999	50%-100%	Same	0	/
BiH	100%	100%	All in EN1990, EN1991-1-1 to EN1991-1-5 and EN1998-1	Diff.	8	Networking, Czech Office for standards, metrology and testing
FYROM	100%	100%	All, except climatic maps	Around 90%	All, except SH and climatic maps	/
Kosovo*	In progress	100%	0	0	0	Networking with DGS Albania

Questionnaire – Part A: Summary

Country	EN part translated	EN part published as NS	Progress of NDPs	Acc. of RVs	NAs published	Comments
Albania	All, except EN1995 and EN1999	All, except EN1995 and EN1999	50%-100%	Same	0	/
BiH	100%	100%	All in EN1990, EN1991-1-1 to EN1991-1-5 and EN1998-1	Diff.	8	Networking, Czech Office for standards, metrology and testing
FYROM	100%	100%	All, except climatic maps	Around 90%	All, except SH and climatic maps	/
Kosovo*	In progress	100%	0	0	0	Networking with DGS Albania
Moldova	100%	100%	All in EN1990-EN1995	90%	16	Networking with Romanian standards assoc., TU – Bucharest, Czech Office for standards, metrology and testing

Questionnaire – Part A: Summary

Country	EN part translated	EN part published as NS	Progress of NDPs	Acc. of RVs	NAs published	Comments
Albania	All, except EN1995 and EN1999	All, except EN1995 and EN1999	50%-100%	Same	0	/
BiH	100%	100%	All in EN1990, EN1991-1-1 to EN1991-1-5 and EN1998-1	Diff.	8	Networking, Czech Office for standards, metrology and testing
FYROM	100%	100%	All, except climatic maps	Around 90%	All, except SH and climatic maps	/
Kosovo*	In progress	100%	0	0	0	Networking with DGS Albania
Moldova	100%	100%	All in EN1990-EN1995	90%	16	Networking with Romanian standards assoc., TU – Bucharest, Czech Office for standards, metrology and testing
Montenegro	44% (26 parts)	44% (26 parts)	n/a	Diff.	44% (26 parts)	Twinning with NSB from Austria

Questionnaire – Part A: Summary

Country	EN part translated	EN part published as NS	Progress of NDPs	Acc. of RVs	NAs published	Comments
Albania	All, except EN1995 and EN1999	All, except EN1995 and EN1999	50%-100%	Same	0	/
BiH	100%	100%	All in EN1990, EN1991-1-1 to EN1991-1-5 and EN1998-1	Diff.	8	Networking, Czech Office for standards, metrology and testing
FYROM	100%	100%	All, except climatic maps	Around 90%	All, except SH and climatic maps	/
Kosovo*	In progress	100%	0	0	0	Networking with DGS Albania
Moldova	100%	100%	All in EN1990-EN1995	90%	16	Networking with Romanian standards assoc., TU – Bucharest, Czech Office for standards, metrology and testing
Montenegro	44% (26 parts)	44% (26 parts)	n/a	Diff.	44% (26 parts)	Twinning with NSB from Austria
Serbia	27% (16 parts)	100%	100%, except EN1996 and EN1997	Diff.	80% (46 parts)	/


Questionnaire – Part A: Summary

Country	EN part translated	EN part published as NS	Progress of NDPs	Acc. of RVs	NAs published	Comments
Albania	All, except EN1995 and EN1999	All, except EN1995 and EN1999	50%-100%	Same	0	/
BiH	100%	100%	All in EN1990, EN1991-1-1 to EN1991-1-5 and EN1998-1	Diff.	8	Networking, Czech Office for standards, metrology and testing
FYROM	100%	100%	All, except climatic maps	Around 90%	All, except SH and climatic maps	/
Kosovo*	In progress	100%	0	0	0	Networking with DGS Albania
Moldova	100%	100%	All in EN1990-EN1995	90%	16	Networking with Romanian standards assoc., TU – Bucharest, Czech Office for standards, metrology and testing
Montenegro	44% (26 parts)	44% (26 parts)	n/a	Diff.	44% (26 parts)	Twinning with NSB from Austria
Serbia	27% (16 parts)	100%	100%, except EN1996 and EN1997	Diff.	80% (46 parts)	/
Turkey	44%	100%	0	0	1	TBEC (2018)

Questionnaire – Part B

Country	B1. Eurocodes in NRF	B2. Eurocodes in public procurements/ certain categories of structures	B3. Obligatory use of any EN part
Albania	No	No	No
BiH	Eurocode 2 and Eurocode 6	Eurocode 2 and Eurocode 6	BAS EN related standards
FYROM	No	No	No
Kosovo*	No – (roadmap for adoption, implementation and promotion of the Eurocodes)	No (by law) - (in practice for high risked structures)	No
Moldova	No – approved NAP, 2014-2020 (Decision no. 933, dated 2014)	No	No
Montenegro	Anticipated – end of 2019 (NAP for adoption and implementation dated 2014)	No	No
Serbia	n/a	Usually for most important infrastructure projects (parallel use)	n/a
Turkey	No - the construction engineering practices in Turkey is largely governed by the provisions in the Turkish Building Earthquake Code (TBEC), enforced 01.01.2019. Some sections of the Eurocode parts and some EN standards are incorporated to TBEC, (EN1990 Annex D; EN1992-1; EN1993-1-3; EN1995 (12); EN1996-1 (11); EN15129; EN1997 (16))		

Questionnaire – Part B

Country	B1. Eurocodes in NRF	B2. Eurocodes in public procurements/ certain categories of structures	B3. Obligatory use of any EN part
Albania	No	No	No
BiH	Eurocode 2 and Eurocode 6	Eurocode 2 and Eurocode 6	BAS EN related standards
FYROM	No	No	No
Kosovo*	No – (roadmap for adoption, implementation and promotion of the Eurocodes)	No (by law) - (in practice for high risk structures)	No
Moldova	No – approved NAP, 2014-2020 (Decision no. 933, dated 2014)		No
Montenegro	Anticipated – end of 2019 (NAP for adoption and implementation dated 2014)		No
Serbia	n/a	Usually for most important infrastructure projects (parallel use)	n/a
Turkey	No - the construction engineering practices in Turkey is largely governed by the provisions in the Turkish Building Earthquake Code (TBEC), enforced 01.01.2019. Some sections of the Eurocode parts and some EN standards are incorporated to TBEC, (EN1990 Annex D; EN1992-1; EN1993-1-3; EN1995 (12); EN1996-1 (11); EN15129; EN1997 (16))		

Questionnaire – Part A: Summary

Country	EN part translated	EN part published as NS	Progress of NDPs	Acc. of RVs	NAs published	Comments
Albania	All, except EN1995 and EN1999	All, except EN1995 and EN1999	50%-100%	Same	0	/
BiH	100%	100%	All in EN1990, EN1991-1-1 to EN1991-1-5 and EN1998-1	Diff.	8	Networking, Czech Office for standards, metrology and testing
FYROM	100%	100%	All, except climatic maps	Around 90%	All, except SH and climatic maps	/
Kosovo*	In progress	100%	0	0	No	SECOND GOAL Networking with DGS Albania
Moldova	100%	100%	All in EN1990-EN1995	90%	16	Networking with Romanian standards assoc., TU – Bucharest, Czech Office for standards, metrology and testing
Montenegro	44% (26 parts)	44% (26 parts)	n/a	Diff.	44% (26 parts)	Twinning with NSB from Austria
Serbia	27% (16 parts)	100%	100%, except EN1996 and EN1997	Diff.	80% (46 parts)	/
Turkey	44%	100%	0	0	1	TBEC (2018)

SECOND GOAL

CONCLUSIONS

back to the CEN-CENELEC event in 2016

How to facilitate the process of adoption and implementation of the Eurocodes?

- ❑ **There is a need for creating a regional platform to boost regional collaboration in adoption and implementation of the Eurocodes in particular for harmonization of seismic hazards, snow, wind and thermal maps.**
- ❑ It is proposed to launch bilateral projects for building national capacities for adoption and implementation of the Eurocodes (positive examples – BiH and Chezh Standardization Institute, KSA and Albanian Standardization Agency).
- ❑ Explore possibilities for organizing regional training courses supported by European Commission's JRC Enlargement and Integration Action in order to further facilitate the implementation of the Eurocodes in the Balkan region.

"The way forward for the Eurocodes implementation in the Balkans"

10-11 October 2018, Tirana

The concept of the Eurocodes Community of Practice in the Balkan region

**S. Dimova, A. Athanasopoulou,
R. Apostolska, L. Sousa**

CONCLUSIONS

back to the CEN-CENELEC event in 2016

How to facilitate the process of adoption and implementation of the Eurocodes?

- ❑ There is a need for creating a regional platform to boost regional collaboration in adoption and implementation of the Eurocodes in particular for harmonization of seismic hazards, snow, wind and thermal maps.
- ❑ **It is proposed to launch bilateral projects for building national capacities for adoption and implementation of the Eurocodes (positive examples – BiH and Czech Standardization Institute, KSA and Albanian Standardization Agency, Moldova and TU Bucharest and Czech Standardization Institute)**
- ❑ Explore possibilities for organizing regional training courses supported by European Commission's JRC Enlargement and Integration Action in order to further facilitate the implementation of the Eurocodes in the Balkan region.

CONCLUSIONS

back to the CEN-CENELEC event in 2016

How to facilitate the process of adoption and implementation of the Eurocodes?

- ❑ There is a need for creating a regional platform to boost regional collaboration in adoption and implementation of the Eurocodes in particular for harmonization of seismic hazards, snow, wind and thermal maps.
- ❑ It is proposed to launch bilateral projects for building national capacities for adoption and implementation of the Eurocodes (positive examples – BiH and Czech Standardization Institute, KSA and Albanian Standardization Agency, Moldova and TU Bucharest and Czech Standardization Institute)
- ❑ **Explore possibilities for organizing regional training courses supported by European Commission's JRC Enlargement and Integration Action in order to further facilitate the implementation of the Eurocodes in the Balkan region.**

Training and Promotion in the Balkans ... the future

2018 - Workshop

(Albania)

- ✓ process of implementation of the Eurocodes
- ✓ identification of needs for training and information

**But beyond 2021
???**

2020/2021 - Thematic Seminar

(JRC – Ispra)

- ✓ increase awareness of national stakeholders on the current Eurocodes
- ✓ inform on the Eurocodes 2nd generation (2020)

2019/2020 - Summer school

(host country?)

- ✓ train on the use of Eurocodes in the design practice
- ✓ focus on most common design cases (seismic design of concrete buildings)

Source: Athanasopoulou, WS Tirana, 2018

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Thank you for your attention!

Stay in touch



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