



*Date: May 29, 2019*

*Place: Tuzla*

# Knowledge **FOR** Resilient soCiEty

**TEXT BOOK – FIRE SAFETY IN BUILDINGS**

*University of Tuzla*

*University of Novi Sad*

*University of Banja Luka*

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# TITLE: Fire Safety in Buildings

## Initial table of content and institutions

Chapters	Selected Topics	Institutions (proposal)
Introduction	Fire prevention history in WBC Overview of Fire Statistics in WBC	The Editors
<b>Section 1: Fire Safety Engineering</b>		
1. Design Concerns, introduction		UNTZ
2. Control of ignition	Control of flammability Control of growth of fire Fire safety management	
3. Fire protection passive measures	Fire spread between structures Compartmentation Fire Barriers	
4. Fire protection active measures	Fire detection Smoke control Fire-fighting systems	
5. Means of Escape	Occupancy and exit capacity Travel distances and times Minimum fire protection measures	



## Section 2: Fire Safety Building Analysis

1. Introduction		The Editors
1. Short overview of buildings and settlements in WBC	History of Settlements' development Building Typology Typology of construction technology	UNS
2. Properties of materials at elevated temperatures	CPR Brick Concrete Steel Wood Plastics .....	UNBL/UNS
3. Fire Resistance of Structures	Structure collapse Eurocodes – structural fire design Fire load calculation methods .....	UNBL/UNS



## Section 3: Tools for Fire Risk assessment and management

1. Introduction		The Editors
2. Risk identification	Fire hazard and risk Exposure to fire risk Fire risk prevention and mitigation	UNS
3. Social Vulnerability and impact analysis	Vulnerability of structures Social vulnerability	
4. Qualitative Fire risk assessment	Risk Matrix Event-Tree Method	
5. Quantitative Fire risk assessment	Risk Matrix Event-Tree Method	
6. Evacuation calculation and modelling	PyroSim Pathfinder	



## Section 4: Perspective on Fire Risk Management in the Balkans

1. Serbia	Actual practice Legislation Case studies .....	UNS/VTSNS
2. Bosnia and Herzegovina		UBL/UTZ
3. Albania ????		UT/EPOKA
4. Montenegro ???		UM/UkiM
5. Macedonia ???		UKiM/UM

## Section 5: Concluding remarks

1. FS in the Balkans and beyond – A comparative Overview and Recommendations		The Editors
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## TEXTBOOK TITLE: **Fire Safety in Buildings**

- *28th February 2019 – UNTZ sent first draft (Section 1 and Section 4 - National Chapter) to UNS and UNBL*
- *27th May 2019 – UNS sent first draft to UNTZ (part of Section 2)*
- *What have been done so far?*
  - ✓ *Section 1 – completed*
  - ✓ *Section 2 – partial*
  - ✓ *Section 3 – unknown*
  - ✓ *Section 4 – UNTZ only (B&H)*
  - ✓ *Section 5 – concluding remarks*



University of Tuzla:

first draft sent to UNS and UNBL in local language on 28th Feb 2019.

Chapters	Selected Topics	Authors
Introduction	Fire prevention history in WBC Overview of Fire Statistics in WBC	The Editors
<b>Section 1: Fire Safety Engineering</b>		
1. Design Concerns, introduction		Edisa Nukic Jelena Markovic
2. Control of ignition	Control of flammability Control of growth of fire Fire safety management	
3. Fire protection passive measures	Fire spread between structures Compartmentation Fire Barriers	
4. Fire protection active measures	Fire detection Smoke control Fire-fighting systems	
5. Means of Escape	Occupancy and exit capacity Travel distances and times Minimum fire protection measures	

### Section 4: Perspective on Fire Risk Management in the Balkans

2. Bosnia and Herzegovina	Actual practice Legislation Case studies	UBL (?) – not send yet UNTZ (Dr.sc. Jelena Marković Dr.sc. Edisa Nukić) - completed
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Section 2: Fire Safety Building Analysis

1. Introduction		The Editors
1. Short overview of buildings and settlements in WBC	History of Settlements' development Building Typology Typology of construction technology	? UNS
2. Properties of materials at elevated temperatures	Introduction Materials properties at elevated temperatures Concrete Steel Reinforcement Masonry Timber Aluminium Plastics and plastic-based composites Gypsum Glass	Vesna Bulatovic – completed on 27th May 2019
3. Fire Resistance of Structures	Structure collapse Eurocodes – structural fire design Fire load calculation methods .....	? UNS/UNBL







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Thank you  
for your attention

*Contact info about the presenter:  
edisa.nukic@untz.ba*

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