



Type of Project:	Housing – DuSoCC Durable Solutions for Collective Centre Residents	Country:	BiH – Bosnia-Herzegovina			
Approach:	Individual Housing	Realisation - Year:	2002-2005			
Project Name:	DuSoCC BiH Standard Houses 6 types	Version: 3	Date: 06 December 2005			

DuSoCC BiH Standard Houses Programme





Context - Situation in BiH

Ten years after the war ended, Bosnia-Herzegovina remains confronted with the problem of displaced persons (DPs). As of the end of December 2004, 309,240 persons were still displaced in the country. While the pace of returns has increased in recent years, many DPs continue to reside in Collective Centres (CCs) where they await durable solutions of their housing problems. These CCs provide, for the most part, only the most basic accommodation. Many are converted facilities such as former schoolhouses, closed hotels, barracks or housing containers.

Housing, the main objective of the DuSoCC Programme

The main objective of the "Durable Solutions for Collective Centre Residents" (DuSoCC) programme, a SHA secondment at UNHCR Sarajevo is to provide durable housing solutions for CC residents: creation of decent accommodation by reconstruction or rehabilitation of destroyed or damaged private houses (mostly in rural area) and social apartments (in urban area).

Approach - "tipske kuće": 6 types of standardized individual houses

Confronted with numerous cases of completely destroyed potential rehab objects,

the DuSoCC programme management developed 6 types of low-budget standard houses:

- type 1A (39 m² for 1–2 persons: small living room with kitchenette, 1 bedroom, small bathroom);
- type 1B (48 m² for 3–4 persons: living room with kitchenette, 1 bedroom, bathroom);
- type 2A (68 m² for 5–6 persons: large living room with kitchenette, 2 bedrooms, bathroom, pantry/larder);
- type 2B (70 m² for 5–6 persons: large living room with kitchenette, 2 bedrooms, bathroom);
- type 3 (88 m² for 7–8 persons: large living room with kitchenette, 3 bedrooms, bathroom, pantry);
- type 4 (2x58 m² for 9–12 persons: living room, kitchen/dining room, 4 bedrooms, bathroom, storeroom).

Implementation - Results

55 DuSoCC BiH standard houses have been realized in 2002/2004 (status as on 31 December 2004): 16 objects type 1A, 24 objects type 1B, 1 object type 2A, 6 objects type 2B, 3 objects type 3, 5 objects type 4

The pilot project of the DuSoCC BiH standard houses programme was a type 4 (2x58 m²) standard house, localized in Vogošća-Kamenica/Gora (Kanton Sarajevo), designed and implemented by DuSoCC Sarajevo for the SHA Field Office Knin funded Cross Border from Croatia to Bosnia-Herzegovina Return Project (CBP HR-BiH); the contractor in charge was "Sajting" d.o.o. Sarajevo – privredno društvo za projektovanje, inženjering i usluge, BiH-71000 Sarajevo, ulica Hadži Sulejmanova 2 (director Mr Mirza Hodžić).

Lessons learnt

- what was useful in the approach?
 - the proposed standardization rationalized and accelerated the construction procedure: fitting of standard component parts (joinery: windows, doors, sanitary facilities, kitchen equipment);
 - the proposed standardization facilitated the cost estimate, tender procedure and tender comparison;
 - the availability of six different sized types enabled us to develop tailor-made solutions.
- what should be done differently next time?
 - nothing we're very satisfied with the results we achieved by this standardization approach.

Preconditions for this approach

Standard houses projects in urban context (in Vogošća town for example) require usually a special project approval: a detailed project documentation authorized by a local architect/engineer has to be submitted to the local building supervisory board.

Evaluation

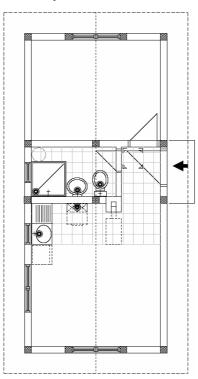
Joint Evaluation-SHA/UNHCR of DuSoCC programme to BiH, 21 - 30 April 2002 Heinrich Gloor, Consultant, SHA/SDC, Bern & Melesse Tegegne, EESS/DOS, Geneva EESS Mission Report 02/09

For further information

Recommended contacts:	René Edward Knupfer, SHA Secondee at UNHCR Vladikavkaz
Recommended institutions:	SHA Berne, Specialised Group for Construction (Heinrich Gloor)
Recommended books/reports:	DuSoCC-BiH Shelter Standards, PowerPoint presentation 08.11.'05
Relevant other projects (links):	(none)



tipska kuća 39



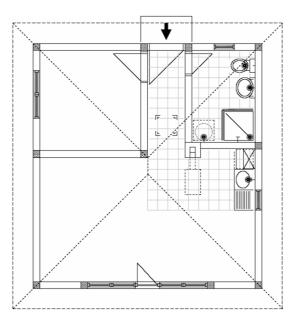
Budget – DuSoCC BiH standard house, type 1A, $39 \text{ m}^2 (9.40 \text{ m x } 4.20 \text{ m})$

Total costs BAM 18,447 (07.08.2003) = EUR 9,432

tipska kuća 39 (tip 1A)	objects	rooms	persons	floorspace	floorspace	1	volume	volume				
39m² (9.40mx4.20m)				gross	net		gross	net				
BAM 18'447 (07.08.2003)	#	#	#	m²	m²		m³	m³				
unit [#, m², m³]	1	2	2	39.48	32.54	= 82.4% of gross	183.58	81.36	= 44.3% of gross			
costs per unit [EUR]	9'432	4'716	4'716	239	290		51	116				



tipska kuća 48



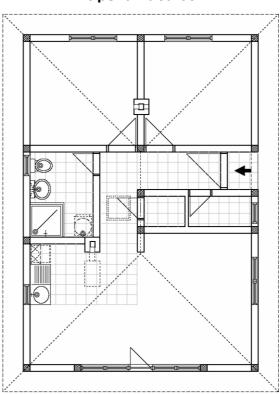
Budget - DuSoCC BiH standard house, type 1B, 48 m² (7.20 m x 6.70 m)

Total costs BAM 24,010 (02.03.2004) = EUR 12,276

Г	tipska kuća 48 (tip 1B)	objects	rooms	persons	floorspace	floorspace		volume	volume	
1	48m² (7.20mx6.70m)				gross	net		gross	net	
L	BAM 24'010 (02.03.2004)	#	#	#	m²	m²		m³	m³	
	unit [#, m², m³]	1	2	3	48.24	40.56	= 84.1% of gross	200.01	101.39	= 50.7% of gross
С	costs per unit [EUR]	12'276	6'138	4'092	254	303		61	121	



tipska kuća 68



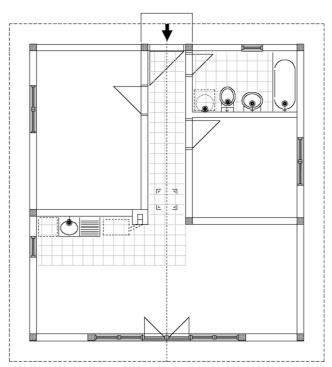
Budget – DuSoCC BiH standard house, type 2A, $68 \text{ m}^2 \text{ (9.90 m x 6.90 m)}$

Total costs BAM 28,544 (26.10.2004) = EUR 14,594

tipska kuća 68 (tip 2A)	objects	rooms	persons	floorspace	floorspace		volume	volume				
68m² (9.90mx6.90m)				gross	net		gross	net				
BAM 28'544 (26.10.2004)	#	#	#	m²	m²		m³	m³				
unit [#, m², m³]	1	3	5	67.54	56.11	= 83.1% of gross	296.10	140.27	= 47.4% of gross			
costs per unit [EUR]	14'594	4'865	2'919	216	260		49	104				



tipska kuća 70



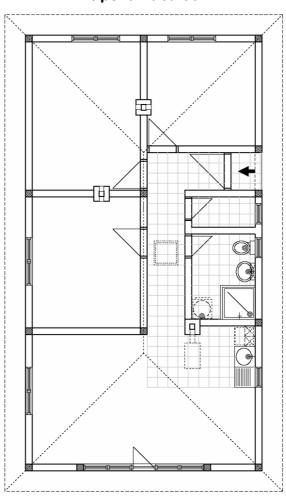
Budget – DuSoCC BiH standard house, type 2B, $70 \text{ m}^2 (8.70 \text{ m x } 8.00 \text{ m})$

Total costs BAM 31,326 (02.12.2003) = EUR 16,017

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tipska kuća 70 (tip 2B)	objects	rooms	persons	floorspace	floorspace	•	volume	volume				
70m² (8.70mx8.00m)				gross	net		gross	net				
BAM 31'326 (02.12.2003)	#	#	#	m²	m²		m³	m³				
unit [#, m², m³]	1	3	5	69.60	59.30	= 85.2% of gross	349.74	148.25	= 42.4% of gross			
costs per unit [EUR]	16'017	5'339	3'203	230	270		46	108				



tipska kuća 88



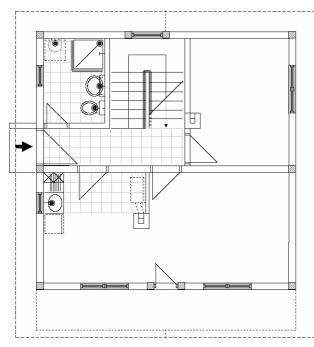
Budget – DuSoCC BiH standard house, type 3, $88 \text{ m}^2 \text{ (12.80 m x 6.90 m)}$

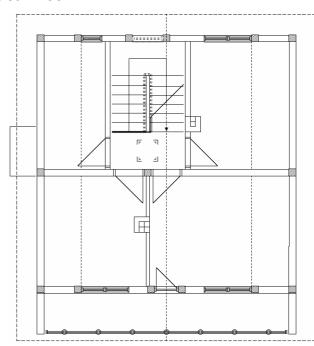
Total costs BAM 41,703 (17.08.2004) = EUR 21,322

tipska kuća 88 (tip 3)	objects	rooms	persons	floorspace	floorspace		volume	volume	
88m² (12.80mx6.90m)				gross	net		gross	net	
BAM 41'703 (17.08.2004)	#	#	#	m²	m²		m³	m³	
unit [#, m², m³]	1	4	7	87.55	73.98	= 84.5% of gross	390.65	184.94	= 47.3% of gross
costs per unit [EUR]	21'322	5'331	3'046	244	288		55	115	



tipska kuća 2x58





Budget – DuSoCC BiH standard house, type 4, $2x58 \text{ m}^2 (2 \text{ x } 7.60 \text{ m x } 7.60 \text{ m})$

Total costs BAM 44 139 (14 08 2002) = FUR 22 568

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tipska kuća 2x58 (tip 4)	objects	rooms	persons	floorspace	floorspace		volume	volume					
2x58m² (2x7.60mx7.60m)			l	gross	net		gross	net					
BAM 44'139 (14.08.2002)	#	#	#	m²	m²		m³	m³					
unit [#, m², m³]	1	5	9	115.52	91.54	= 79.2% of gross	355.80	228.99	= 64.4% of gross				
costs per unit [EUR]	22'568	4'514	2'508	195	247		63	99					

DuSoCC BiH project preparation & implementation procedures flowchart

BEGIN: DuSoCC standard house project

potential beneficiary applies for participation in DuSoCC housing programme

beneficiary selection (UNHCR-recognized CC residents only)

by DuSoCC field staff in close cooperation with UNHCR

housing object identification (ruin of private house)

by DuSoCC programme officer with DuSoCC field staff, preferably in on-site presence of the potential beneficiary

property rights verification

by DuSoCC administration (basis: updated cadastral records)

tripartite agreement signing

between DuSoCC as the donor, the beneficiary & the municipality of return stipulating the beneficiary's unconditional obligation of deregistration from his CC resident status and moving into his reconstructed house without delay; no sale or renting admitted for a minimum term of five years

project documentation

by DuSoCC programme manager for DuSoCC standard houses (types 39 m², 48 m², 68 m², 88 m², 2x58 m²) : detailed plans 1:50 ground plan (layout), cross section, elevation (façades) & technical specification

?
urban context
yes / no

mandatory project approval procedure by a licenced local architect or engineer:

approved project documentation

urban planning permit request

urban planning permit approval

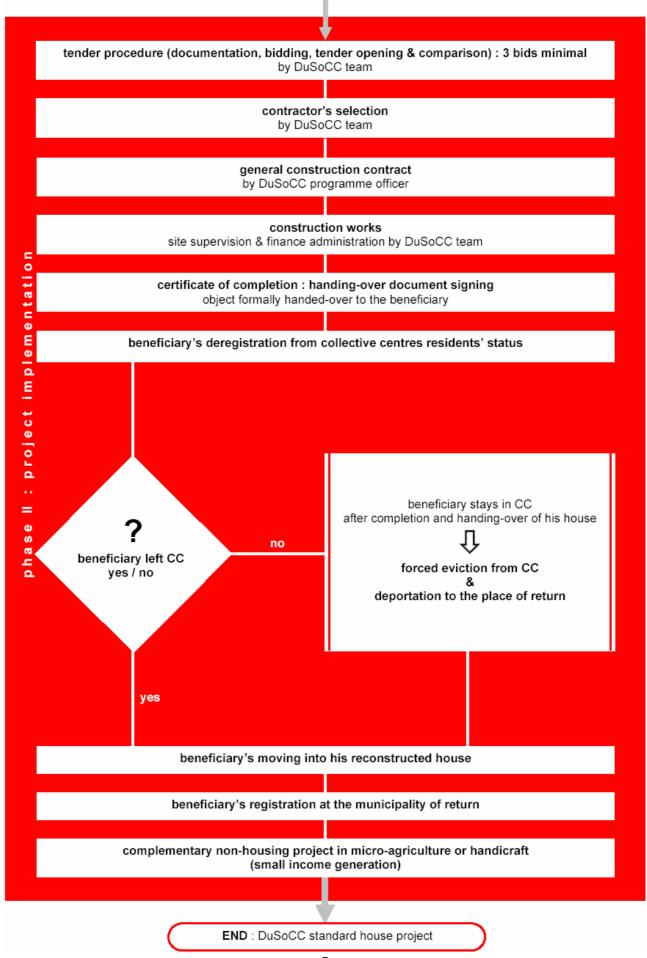
building permit request

Û

building permit approval

no

phase I: project preparation



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guarantee works supervision (one year beginning from the date of the certificate of completion)