

Strategy Status	Version	Status	Effective date	Revised	Next revision
	0.3	DRAFT	7 November 2017		<date>
	0.4		13 November	Shelter costs consistency	

Shelter Working Group Structure

Response name	Hurricane Maria response Dominica
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Strategic Advisory Group (SAG) - Agencies	Ministry of Housing, Dominica Red Cross Society / IFRC, Caritas Dominica / CRS, UNDP, Samaritans Purse, IOM
Endorsing WG partner Members	Ministry of Housing, Dominica Red Cross Society / IFRC, Caritas Dominica / CRS, UNDP, Samaritans Purse, IsraAid, Digicel, IOM, ShelterBox, Emergency Architects, Habitat for Humanity, Helping Hands, Is there Not a Cause (ITNAC)
Relevant Technical Working Groups (TWiGs)	Emergency shelter Standards, specifications and guidance for emergency shelter & NFI support packages Shelter repair and recovery Standards, specifications and guidance for shelter repair and reconstruction interventions

Shelter Cluster Strategy

<p>Situation</p>	<p>In September 2017, Dominica was devastated by the category 5 Hurricane Maria, causing pervasive shelter damage and the potential for significant and extended displacement. The hurricane grew to an unanticipated strength in the 18 hours before landfall, strengthening from category 2 to 5 within a matter of hours and leaving many people and homes insufficiently prepared for its impact. The Caribbean Disaster Emergency Management Agency (CDEMA) has confirmed 26 fatalities and 31 individuals remain missing. According to data from the Pacific Disaster Centre, an estimated 5,961 houses were completely destroyed, 10,272 highly damaged and 7,255 moderately damaged.</p>
<p>Response Plan Objectives</p>	<p>Households with destroyed or damaged houses, including displaced populations, attain protective and sustainable shelter solutions;</p>
<p>Shelter WG Objectives</p>	<p>EMERGENCY Shelter Sector objective</p> <ul style="list-style-type: none"> E1: Shelter Sector partners will provide immediate life-saving emergency shelter in the form of tarpaulins / plastic sheets (and fixings) or tents (only for specific situations including total destruction of house in rural areas) for 18,108 HH whose house has been damaged by Hurricane Maria. E2: Shelter Sector partners will provide supporting NFI packages (household kits containing items like kitchen sets, mosquito nets, blankets etc.) for the 5,961 households with a completely destroyed house. <p>EARLY RECOVERY (2 months – 1 year) Shelter Sector Objective: (It is estimated that 50% of the households had damage insurance sufficient for or have access to funding for the self recovery of a safe shelter solution)</p> <ul style="list-style-type: none"> R1: Provide safe temporary shelter solutions for 2,980 households (50% of the households whose house has been totally damaged) in the form of transitional shelter support, cash contributions or support in collective centers, while permanent solutions are being developed. R2: Provide safe space (at least 3.5 m2 per family member) for 5,135 households (50% of the households whose house has been severely damaged) through the repair of their roof and supporting structure using consultative and participatory processes. R3: Provide safe space (at least 3.5 m2 per family member) for 3,628 households (50% of the households whose house has been moderately damaged) through the repair of their roof with timber and CGI sheets using consultative and participatory processes. R4: Provide safe space (at least 3.5 m2 per family member) for 1,295 households (50% of the households whose house has been slightly damaged) through the repair of their roof with CGI sheets using consultative and participatory processes. R5: Support the resilient self-recovery of 13,039 households who have insurance and are less vulnerable with technical advice and communication materials for 1 year. <p>RECOVERY (> 1 year) Support permanent housing solution for 2,980 households who lost their homes through the construction of their new home in their place of origin or in a new location.</p>
<p>Key Issues</p>	<ul style="list-style-type: none"> The sector will target the households that meet the vulnerability criteria (see Annex) as agreed with the Ministry of Social Services Dominica faces a high risk of earthquakes, hurricanes and volcano eruptions, therefore all repair and reconstruction activities must respect the building codes as much as feasible given the state of the previous construction, time and budget restrictions. The main priority is that the households have a safe place to live and the shelter sector supports an approach of progressive upgrades. (see Annex 2) The shelter sector works in support of the structures and activities of the government of Dominica The “dominican spirit” of working together will be mobilized to reach the reconstruction targets Where feasible construction materials will be sourced locally or imported through local traders.

Assessments	Pending the results of the Housing Damage assessment conducted by the Ministry of Housing and UNDP in October – November 2017 the shelter sector works with The Pacific Disaster Center house damage estimates based on extrapolated data from aerial imagery from Copernicus.		
	Aerial Survey (PDC)		
	# of home	Copernicus Damage Per cent	Extrapolated data for 26,085 homes in Dominica Govt. Census)
	2	< 1%	No damage 8
	672	10%	Slightly damaged 2,589
	1,883	28%	Moderately damaged 7,255
	2,666	39%	Highly damaged 10,272
Monitoring and Evaluation	1,547	23%	Completely destroyed 5,961
	6,770		Total 26,085
	Agencies report their plans and progress weekly using activity info. Post-distribution and post-activity monitoring will be conducted including gathering feedback regarding activity timeliness, relevance, quality and appropriateness. The shelter sector will actively participate in the establishment and publicising beneficiary feedback mechanisms and channels, critically including ensuring that feedback results if any necessary program adaptation.		

Shelter Emergency and Recovery Response Strategy

Shelter Working Group Response Plan

Target Groups	Emergency response 0-6 months				Target Groups	(Early) Recovery 2 months – 1 year					Recovery > 1 year		Assumptions
	# HH	Target #HH	Approved intervention			# HH	Target #HH (perc)	# interventions	Approved Interventions and Standards		Target # HH	Long term shelter solutions	
HH with totally damaged housing	5,961	5,961 (100%)	E1 NFI kit + E2 Emergency roof (2 tarps or tent ¹)		HH with totally damaged housing	5,961	2,980 (50%) ²	150	Collective center support		2,980	Pre-fab ³ , relocation / reconstruction	Most pre-fabs start after 1 year
								850	Transitional or temporary shelter				Transitional shelter value USD 2,000 – 2,500
								1.980	Cash / insurance top-up / support for host families				Govt plan (\$ amount t.b.d.)
HH with severely damaged housing	10,272	9,245 (90%)	E2 Emergency ro (2 tarps + timber) or tent)		HH with severely damaged housing	10,272	5,136 (50%)	5,136	Resilient house repair		N/A	N/A	House repair: USD 1,544
HH with moderately damaged housing	7,255	2,902 (40%)	E2 Emergency roof (2 tarps or tent)		HH with moderately damaged housing	7,255	3,628 (50%)	3,628	CGI Roof repair		N/A	N/A	CGI roof repair costs USD 623
HH with slightly damaged housing	2,589	0 (0%)	N/A		HH with slightly damaged housing	2,589	1,295 (50%)	1,295	CGI Roof repair		N/A	N/A	CGI roof repair costs USD 319
Total	26,085	18,108				26,085	13,039	13,039			2,980		
					HH than recover themselves		13,039	13,039	Safe shelter training and communication				
					Contractors and tradesmen		200	200	Contractor and tradesmen receive safe shelter training				

¹ Tents provide privacy and can be suitable to bridge the gap between emergency shelter (collective centers and host families) and permanent shelter solutions

² Assumption is that 50% of the households were sufficiently insured before the hurricane and are capable to repair at least one safe room.

³ Pre-fab structures will meet specification required for the seismic and hurricane forces in Dominica

Technical Standards and Intervention Types (based on TWG d.d. 4 October)

INT#	Intervention Name	Description/Specification	Cash / in kind / tech	Notes
	EMERGENCY			
E1	NFI or Household kits	Kitchen sets, solar lamps, blankets, mosquito nets	In kind	
E2	Emergency shelter / roof support	UNHCR / Shelterbox specification tent 2 tarpaulins (minimum 5 x 4 meters IFRC specification) with timber and fixing materials (nails, washers)	In kind	Preferably in combination with a tool kit including a hammer, combination plier, aviation snips, crow bar, handsaw, tape measure
	EARLY RECOVERY		<i>All material prices below are based on the lowest quotations received by IOM from Dominica and international suppliers per 1 November 2017</i>	
R1	Collective center support	Repair of roof, additional WASH facilities, kitchen, partitioning	In kind	Lump sum USD 15,000 per unit
R2	Transitional shelter	Temporary shelter for 6 months - 2 years to bridge the gap to a durable / permanent solution. TS are built on existing foundation, timber frame with bracing and roof covered with CGI sheets. Walls are made from Plywood, or salvaged materials.	In kind / cash	USD 2,250 (including labour)
R3	Cash / insurance top-up / support for host families	Extension of host family house, cash support, special facilities	Cash	USD 1,000 (t.b.d)
R4.1	Resilient house repair Severely damaged	Repair or re-construction of at least one safe permanent room SPHERE standards Average of 20 CGI sheets 24", 4 ridge capping, 6 timbers, 10 hurricane straps (twisted metal), 350 screws with washer + 2 days labour of a team of 3 persons	In kind / cash	Material USD 1,304 Labour USD: 240 Total: USD 1,544
R4.2	CGI Roof repair Moderately damaged	Average of 10 CGI sheets 24", 2 ridge capping, 3 timbers, 10 hurricane straps (twisted metal), 200 screws with washer + 1 days labour of a team of 3 persons	In kind / cash	Material USD 503 Labour USD: 120 Total USD: 623
R4.3	CGI Roof repair Slightly damaged	Average of 6 CGI sheets 24", 1 ridge capping, 1 timbers, 10 hurricane straps (twisted metal), 100 screws with washer + 0.25 days labour of a team of 3 persons	In kind / cash	Material USD 289 Labour USD 30 Total: USD 319
R5	Safe shelter training and communication	For self recovering families and households that receive external support	In kind	
R6	Contractor and tradesmen receive safe shelter training	Focused on roof and house repair according to the Dominica Building code standards Model house on the job training / demonstrations	In kind	
R7	Pre-fab houses, relocation / reconstruction	Design and construction of a permanent or pre-fab structure	In kind / cash	T.b.d. An average 3 room house in Dominica costs around USD 120,000

Estimated BOQ and Material Prices

- Prices are indicative, based on published prices and quotations / procurement data from IOM d.d October 2017
- The material specification is based on the “draft Dominica Building standards”.
- It is assumed that 75% of the materials are imported and 25% procured in Dominica.

	Prices Material	Prices INTERNATIONAL					Prices DOMINICA			
UNIT	MATERIAL	Price USD	Country / source	Transport		Total	Price USD	% international	% national	Average price USD
Unit	10' GALVANIZED RIDGE CAPING	11.60	Guyana	5%	0.58	12.18	16.24	75%	25%	13.20
Unit	10' X 33"CGI #24 REGULAR CORRUGATED METAL SHEET (NOT U SHAPE).	33.02	DR	5%	1.65	34.67	47.55	75%	25%	37.89
Unit	(Treated or natural resistance to termites) TIMBER 2"X4"X10'	6.83	DR	7%	0.48	7.31	10.10	75%	25%	8.01
Unit	(Treated or natural resistance to termites) TIMBER 2"X6"X20'	20.00	DR	7%	1.40	21.40	28.67	75%	25%	23.22
Unit	(Treated or natural resistance to termites) TIMBER 2"X3"X12'	6.42	DR	7%	0.45	6.87	8.58	75%	25%	7.30
Unit	ROOFING SCREWS 3".WITH SEALING WASHER	0.12	US (amazon)	5%	0.01	0.13	0.17	75%	25%	0.14
Unit	HURRICANE STRAPS. TWISTED METAL. 1/8" x9"	0.32	US (amazon)	5%	0.02	0.34	0.45	75%	25%	0.36

	Quantities per Intervention	Slightly damaged			Medium damaged			Higly damaged		
UNIT	MATERIAL	UD	USD	TOTAL	UD	USD	TOTAL	UD	USD	TOTAL
Unit	10' GALVANIZED RIDGE CAPING	1	13.20	13.2	3	13.20	40	6	13.20	79
Unit	10' X 33"CGI #24 REGULAR CORRUGATED METAL SHEET (NOT U SHAPE).	6	37.89	227.3	9	37.89	341	21	37.89	796
Unit	(Treated or natural resistance to termites) TIMBER 2"X4"X10'	1	8.01	8.0	2	8.01	16	7	8.01	56
Unit	(Treated or natural resistance to termites) TIMBER 2"X6"X20'	1	23.22	23.2	2	23.22	46	9	23.22	209
Unit	(Treated or natural resistance to termites) TIMBER 2"X3"X12'	0	7.30	0.0	3	7.30	22	10	7.30	73
Unit	ROOFING SCREWS 3".WITH SEALING WASHER	100	0.14	13.7	200	0.14	27	400	0.14	55
Unit	HURRICANE STRAPS. TWISTED METAL. 1/8" x9"	10	0.36	3.6	30	0.36	11	100	0.36	36
				USD 289			USD 503			USD 1,304

Inter sector Coordination

Sector	Lead-Agency	Comments
Coordination	OCHA	Sitreps, shelter advocacy, FA, SRP, intercluster coordination, advocacy with Government
CCCM	IOM	NFIs and shelter needs in collective centres, relocations from and to collective centres, Displaced Tracking Matrix, beneficiary lists and data on vulnerable groups
Early Recovery	UNDP	Housing, building codes, rubble removal, livelihoods
Education	UNICEF	Use of schools as collective centers, relocations from schools
Telecom	WFP	Facilitate beneficiary communications e.g. use of mobile networks, improved operational communication (good bandwidth, security comms)
Food security	WFP/FAO	Distribution points of food relevant for shelter/NFI. Information on beneficiary groups and vulnerabilities
Health	WHO	Incidence of disease that can be avoided by provision of appropriate shelter and NFI, HIV/AIDs and shelter guidance
Logistics	WFP	Transportation, storage, supply chain, customs clearance, security of movement and humanitarian access
Protection	UNICEF	Loss of documentation, GBV, female and child headed households, elderly and disabled, vulnerability data, (child) protection
WASH	UNICEF	Ensure shelter sites have WASH facilities

Annex Vulnerability criteria

In line with the targeting criteria endorsed by the Ministry of Social Services, Gender and Family affairs the shelter Working group adopts the following Vulnerability Criteria:

1. Households that have lost their livelihoods/main income generation source as a result of Hurricane Maria,
2. Households with pregnant and lactating women,
3. Households with children aged 0-59 months, and foster children,
4. Households with disabled, infirmed, severe/chronically ill, and elderly persons,
5. Households headed by elderly persons, and single elderly persons,
6. Single-mother and single-male headed households,
7. Women and girls at risk of sexual exploitation or abuse,
8. Large households with a high dependency ratio—i.e. households with a large number of children under 14 and/or people over 65,
9. Households whose house has been moderately, severely damaged or totally damaged; Especially the ones that were not or insufficiently insured.
10. People who live in collective centres or Informal self-settlements (dispersed shelter (tents), unplanned camps, rental homes), emergency shelter (tents and makeshift structures), emergency rental homes or with host families.