



MEDECINS SANS FRONTIERES
ÄRZTE OHNE GRENZEN

MSF-OCG CONSTRUCTION & REHABILITATION Policy

MSF Section	MSF-OCG, all missions		
Policy title	Construction & Rehabilitation Policy V1-2		
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Introduction

Most MSF-OCG missions rent facilities, build new structures, and rehabilitate existing buildings in order to adapt those structures to our specific medical needs and programs. We encounter many challenges with these activities related to many factors such as: - technical & medical complexity of the projects (from Shelters to Hospitals), - limited available expertise/capacity in our technical & log personnel; - missions' complex environment usually located in resource-poor and isolated locations.

Objective

The policy establishes the principles which MSF-OCG shall follow in all our Missions in order to promote:

- An accountable & reliable "Construction & Rehabilitation process" from start to end (including maintenance) as regards the quality, cost and timeliness of establishment of each project;
- A common "building standard" shared at Inter-MSF Sections level to achieve our medical & operational goals.

Scope

The policy applies to all MSF-OCG Missions. It is applicable to all rented facilities, new building construction projects, rehabilitation of existing buildings, and water & sanitation constructions. Indications stated in the present policy and related guidelines/supporting documents shall be progressively put in place in each MSF-OCG mission.

Under no circumstances shall, any local/national construction document contradict the present OCG general policy.

Content

In an accountable Building Construction & Rehabilitation process, no construction works should start before completion and approval of a complete construction cycle project which is organized in compliance with the "5 prerequisites for Construction" MSF chart and the principles included in the present policy as well as the related guidelines (1)

1. Country Specific Energy Policy [CSP]

1.1. The CSP – which clarifies aspects specific to the context - shall be drafted by the CoTL according to the template provided, submitted to HQ for validation, and then distributed to all staff. It shall be implemented by the CoTL, reviewed annually and updated when necessary (Template annex 5)

1.2. A CSP may never contradict any aspect of the overall MSF-OCG Policy.

2. Safety & Security

All premises present in our missions shall be checked and adequately maintained in safe & secure condition in compliance with the mission security plan and the local/national legislation if any. Similarly they shall be checked in terms of environmental threats (floods, mud, slides, earthquake, etc;). In a post earthquake situation a premises may declared unsafe (according UN-INSARG-EMS98 seism safety grade scale) and must to be checked and authorized prior to occupancy by a qualified chartered civil engineer. New structures with more than one floor and/or span width of more than 6,00m, and all changes in essential structural construction elements of existing structures, shall be checked for compliance with safety and construction standards by a qualified chartered civil engineer. The above consideration includes all the Wat-San and Electrical setup safety as well.

3. Typology

All MSF-OCG Building Construction & Rehabilitation projects shall be managed throughout a systematic process called "Construction & Rehabilitation Cycle Process" which guarantees the quality, cost and timeliness of establishment of each construction project. (2) (3)

Two types of Construction project are defined:

- Temporary and Semi-permanent structures (Shelters)

These are all types of "light" structure which are generally used after emergency events, such as (inflatable) tents, plastic-sheeting, shelters, etc. As an alternative to permanent buildings these structures are meant to last for a

short time (* MSF-Temporary Health Structures: a Guide, 2009). Regardless of their temporary character those structures should imply a “Construction Cycle Process” kept simple and quick to adapt to the specific situation, in particular with regard to the timing of the intervention.

o Permanent Structures

These are all types of “Hard” structures that can be subdivided in two main categories (A & B) of construction project according to three core parameters of analysis -considered independently- : size, budget and technical & medical complexity (4)

Construction Project of Category A.

These projects are thought to respond to requests of “large size”, such as main health facilities. Technically they are complex projects involving many different specialties as well as large budgets. As a general principle that category shall be led by a “Construction Project Leader” who chairs a “Construction Project Committee”.

Construction Project of Category B.

These projects, which can vary in size from a simple health facility to a large ward for instance, should generally be initiated, managed by and steered at the initiative of the HQ-Cell or Mission Project in compliance with MSF-OCG Construction Policy as well as guidelines.

4. Management

The two project categories shall be managed according to the following chart which defines the Construction Cycle Process, roles and responsibilities:

Construction typology	* Construction Project Leader	* Construction Project Committee	Management	Construction Cycle Process	HQ Tech. Referents implication
Permanent Structures <u>Construction project Category A</u>	Always	Always	by Construction Project Committee (steered by Construction Project Leader)	Yes - complete	Construction Ref: systematically involved Other Ref: involved according to tech family dealt with (Med./Log)
Permanent Structures <u>Construction project Category B</u>	Optional (up to RLO)	Optional (up to RLO)	by HQ-Cell. & Mission	Yes - simplified	All Referents (Med./Log): as per request from RLO for specialist support
Semi Permanent <u>Shelters</u>	no	no	By HQ-Cell. & Mission	Yes - simplified	All Referents (Med./Log): as per request from RLO for specialist support

Construction Category A phases	Construction project of category A are typically steered at HQ level from phase 1 to 3 and/or 4; after their management is endorsed at Mission level.	
* Construction Project Leader	Technical person in charge of leading and steering the Construction Project	
* Construction Project Committee	Meeting of key department representatives (typically: all or part of the Cell. and other Tech. Referent as mentioned above) that steer the project along its development. The Construction Project Committee is chaired by the Construction Project Leader	
* Construction Project Committee Participants	Construction Project Leader Cell. Representatives RLO / RMP Construction Referent Logistical Operational Manager Head of Technical Support Serv. Technical Referents (Med./Log)	Chairman – permanent member All or part of, permanent member Representative of the cell - permanent member Permanent member Permanent invitee Permanent invitee Permanent invitee involved according to tech family dealt with

5. Organizational

Although construction activities are intended to achieve our medical goals, they must be adapted, secure and safe for both beneficiaries and MSF personnel. Consequently no Building, Construction & Rehabilitation project shall be undertaken if it is not included in the respective approved Mission Plan of Action which takes into account all medical, technical, financial and human resource parameters necessary for the project.

6. Maintenance

A specific maintenance budget line shall be stated yearly in relation to the needs, and included in all our Mission Project Budgets. In every Mission a Log Buildings Maintenance file shall be realized and always kept up-to-date. The file shall include all the documents of the MSF Mission premises (ownership, contracts, technical inspections done, construction changes if any, electrical and Wat-San plans and schemes, etc;). Complete the documentation a Log. Maintenance Book which contains the scheduled maintenance activity.

7. Legal & Assurance

All MSF-OCG Construction & Rehabilitation projects shall respect both the local/national legislation of the mission country and MSF standards. In principle all new building activities require the formal approval of the respective MSF-OCG levels involved and their Public Counterparts/Authorities when present. All MSF-OCG building activity – and more globally its infrastructures – shall be duly insured in accordance with the local/national legislation and in compliance with MSF-OCG administrative rules. Those rules are further specified by the relevant HQ Legal Office.

8. Donations

Donations shall only be accepted if they are in line with operational/medical strategy and MSF-OCG is able to use and maintain them. Infrastructure built by MSF-OCG shall only be donated in accordance with the content of a prior Agreement of Understanding signed with the local Counterparts/Authorities, and only if the recipient is able to use and maintain them.

8. Support materials, HR, training, standardisation and innovation

8.1. In its HR management OCG shall favour the maintaining and animation of a pool of construction specialists (internal or external).

8.2. The support departments shall continue to develop and update procedures, technical guides and other information in support of field staff involved with transport equipment.

8.3. MSF-OCG shall continue to develop training materials and investigate external training options which comply with OCG policy and strategy.

8.4. Through participation in international working groups and platforms MSF-OCG will contribute to the development of standards in transport equipment which answer to operational needs.

8.5. All involved parties are encouraged to seek new innovations which could answer to field needs, identified or anticipated. When innovation offers a clear benefit it shall be evaluated, developed, and adopted in accordance with the document “MSF-OCG Process of Innovation”.

Note:

(1) For the “5 Prerequisites for Construction” chart see Annex 1)

(2) For the “Construction & Rehabilitation Cycle Process” chart see Annex 2)

(3) For the “Step by Step Construction & Rehabilitation Cycle Process” chart see Annex 3)

(4) For the “Evaluation category score chart”, see Annex 4)

(5) For the “Country construction Specific Policy”, see Annex 5)

THE 5 PRE-REQUISITES FOR THE CONSTRUCTION AND REHABILITATION OF A HEALTH STRUCTURE

1) All construction programmes are linked with MSF medical programs.

- They require an approved evaluation of the situation and a list of the medical needs (assessment/cahier de charge/program).
- They require collaborative work between MSF medical, finance, HR, technical departments and local partner/s.

2) All construction programmes are based on middle/long term logic.

- No permanent building constructions are allowed in instable environments (shelters are an alternative option).
- Construction programs shall be undertaken only after approbation of their strategic resources plans.

3) All construction programmes require a follow up from MSF during the whole “construction cycle process” (before-during-after).

- The construction programme is clearly defined, well documented, backed by the Log. Dep. and endorsed by the Construction Referent.
- The expenses are kept separated for follow-up in the mission accounting (cost accounting analytical axes).
- All maintenance activities shall have their own annual budget forecast.

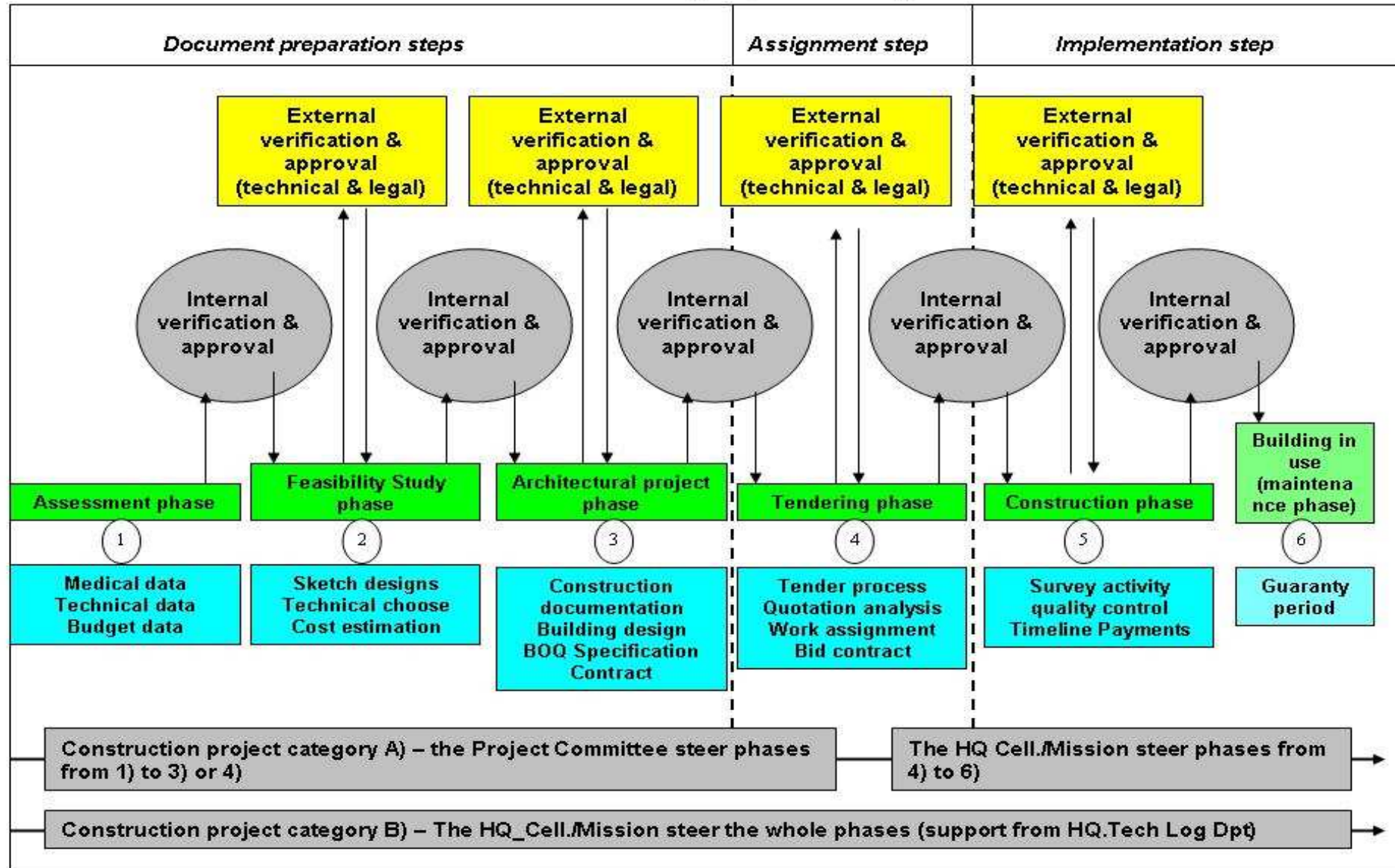
4) All construction programmes require the employment of qualified human resources

- A Log Coord. in the capital city.
- A Log Constructor on the field.
- A deputy constructor on the field.
- A local architect or engineering office to validate plans.
- A local entrepreneur to realise the constructions under MSF supervision.

5) All construction programmes shall respect the local administrative and legal procedures.

- Legal authorisation for the use of the land from the local Authorities.
- Public tender procedures to hire consultant/s.
- Legal building permit application.
- Public tender procedure to choose Constructors.
- On-site inspections procedure during the construction work and temporary/final handing over.
- Handing over procedure with the local partner/s.

MSF OCG – "Construction Cycle process" Diagram



Annex 3) – “Construction & Rehabilitation Cycle Process” Description of the different phases: Who, What, Output (NOTE: the content is just a short summary of the main duties)

	Assessment phase (1)	Feasibility Study phase (2)	Arch project phase (3)	Tendering phase (4)	Construction phase (5)	Building in use (6)
Who	Med. & Log. Dept.	Med. & Log. Dept. (Others)	Log. Dept.	Log. Dept.	Log. Dept.	Med. & Log. Dept.
What	Based on the medical objectives of the project the Medical Dept shall write a Medical Design Brief Chart (MDBC) which details their needs and the quality level in terms of logistic and construction. Examples: Number of beds/patients; number of total users (patients + Team people working in). Number, kind and size of Building / Service / Health post composing the project; Quantity and typology of the services included. Clean & dirty circuit flow needed in the different departments; Equipment (e.g. biomedical devices) needed in support of the services etc. The Logistic Dep. Shall complete an in-depth Technical Assessment (TA) in order to have a complete overview in logistic terms of the situation and the challenges to deal with, like: Legal implication (construction authorization; respect of codes & standards and zoning; Fire, electrical, security rules in force); Land & Building survey (geotechnical, topography, Wat-San, energy). Logistic implication (safety & security, supply, materials); Construction implication (construction market survey, technical & materials available). The two documents shall be shared, discussed and approved between the two Depts. In order to start the Feasibility Study phase	The Logistic Dept. shall prepare a Feasibility Study (FS) matching the medical MDBC and the logistic TA considering all the construction implication and translating the medical requirements into spaces distribution, function activities and dimensions which once elaborated shall be proposed to discussion and approval. Naturally the document shall consider also the following points: Ensure a reasonable sustainability of the project; Consider the cost implication of the project; Evaluate the technical human resources needed and their expertise. include a logical construction process in terms of quality, cost and time needed.; Include also the maintenance aspects of the new facility in the study. The document shall also consider other main aspects like: Legal (local/national building legislation), Logistics (Cost implication, Construction site survey activity, contractor viability, construction HR implication, etc;) . The out coming document (Technical Feasibility Study) shall be shared, discussed and approved from all the involved Depts. in order to be the base-document of the Architectural Project phase	According to the approved TFS the Logistic Dept. prepares a complete Architectural Project File (APF) which takes into account all the TFS points, prepares the necessary technical drawings and specification, and shall ensure respect of the initial MDBC inputs. Naturally the project shall ensure all the technical aspects like: A technical and economical feasibility; A reliable financial budget cost estimation; A reliable logistic supply-chain for tools and materials. A feasible construction work phasing and a credible construction timeframe. The complete agreement of the local Authorities and the respect of the local legislation, codes and standards requirements. The output document (Architectural Project File) must be shared, discussed and approved by all the involved Depts.	According to the approved Architectural Project File (APF) the Logistic steers the whole tendering phase from beginning to end in the case of a Bid contract, or directly steers the whole project if it is an MSF construction; In the case of a Bid contract the tendering phase shall strictly follow the existing MSF's rules in terms of, publication, transparency and assignment tprocedure of the Bid contract.. In addition to the Architectural Project File the minimum attached documentation shall also include: A reliable quotable Bill Quantity; A reliable Timeframe proposal which takes into account all the different construction phases; All the necessary form to be filled by bidders which shall add their Company profile, Tax clearance, Assurances, etc. The output document (Construction contract) must be ratified by all the involved Depts.	Based on the contents of the Construction Contract (CC) the Logistic steers the whole Construction phase focusing on: control of the quality of the works; respect of the established timeframe and cost. The survey activity shall continue until the Provisional and Final reception of the works which are the natural end of the works.	Usually any construction activity (new construction, rehabilitation, renovation) once it is finished has a guarantee period during which any defects shall be corrected according to the contract contents, by the Constructor. A final As-built dossier-file shall be prepared by him as a mandatory building documentation.
Output	Medical Design Brief Chart + Technical Assessment (TA)	Technical Feasibility Study (TFS)	Architectural Project File (APF)	Work assignment & Construction Contract (CC)	Provisory & Final Reception of the Construction	Construction guarantee period

Annex 4) – “Construction & Rehabilitation Cycle Process” – Evaluation Category score Chart

Construction & Rehabilitation Projects – Attribution of a score level to the building construction projects

How to evaluate the complexity of a building construction project?

Three are the major elements which shall be taken into consideration in order to have a clear global picture of the complexity level of a construction building project. These elements are: The Size of the construction; The estimated Budget cost; The technical and medical Complexity.

How to classify a building construction projects in terms of complexity level?

Although it is very difficult to rate and classify construction projects in terms of their technical and medical complexity, we shall categorize them according to the two main categories stated in the Construction Policy (category A and B) using the three elements mentioned above.

The final classification of the Construction Category of a particular building project is the result of a discussion between the HQ-Cell, RLO's and the HQ-Construction Referent. The following chart aims to be a tool to help to classify the building construction projects in terms of category:

LEVEL	*	**	***
CATEGORY			
Size	less than 100 sqm	from 100 to 200 sqm	more than 200 sqm
Budget	less than 50.000CHF	from 50 to 100.000CHF	more than 100.000CHF
Technical Construction Complexity	Level 01 Simple construction (e.g. Waiting area)	Level 02 Medium construction (e.g. IPD Ward)	Level 03 Major construction (e.g. Central Pharmacy)
Medical Operational Complexity	Level 01 (e.g. small PHU)	Level 02 (e.g. OPD department)	Level 03 (e.g. TB Laboratory)

Examples:

Implementation of a waste management area in an existing PHU			
Size	less than 100sqm	*	1
Budget	less than 50.000CHF	*	1
TC Complexity	Level 01	**	2
MO Complexity	Level 02	**	2
		Total	6

Construction of a new 20 bed Maternity delivery unit in a tropical climate			
Size	more than 200sqm	***	3
Budget	between 50/100.000CHF	**	2
TC Complexity	Level 02	**	2
MO Complexity	Level 02	**	2
		Total	9

Construction of a 25 bed TB Ward in a cold climate in an existing TB Hospital			
Size	more than 200sqm	***	3
Budget	more than 100.000CHF	***	3
TC Complexity	Level 03	***	3
MO Complexity	Level 03	***	3
		Total	12

Evaluation:	
Scores from 01 to 10 = Category project B)	
Scores from 11 to 12 = Category project A)	