WATER, SANITATION, HYGIENE AND HABITAT IN PRISONS
SUPPLEMENTARY GUIDANCE
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SUPPLEMENTARY GUIDANCE
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FOREWORD
The International Committee of the Red Cross (ICRC), acting on the basis of its humanitarian mandate, conducts visits to places of detention in diverse situations to monitor conditions of detention and treatment of prisoners. These visits, conducted with the agreement and cooperation of the authorities, are intended to ensure the dignity and integrity of detainees. This means that the ICRC seeks to ensure that detainees live in decent and acceptable conditions and are treated humanely.

Over many years the ICRC has developed considerable experience and knowledge in a wide range of types of places of detention. Regardless of the diversity of these environments, the visiting procedure remains the same and consists of: bilateral confidential talks with the authorities, private talks with detainees, tours of all parts of a prison used by detainees, and repetition of visits to detainees. Recommendations are made concerning humanitarian issues of concern and various forms of assistance may be provided.

Specific experience concerning water, sanitation, hygiene and habitat in prisons was first published in 2005 in *Water, Sanitation, Hygiene and Habitat in Prisons* and updated in 2012. In 2009 an international roundtable was held to examine and consider further the guidance given in that publication in the light of developments in those fields. The result of the roundtable is this publication, which provides additional practical guidance for ICRC staff and others who are working in places of detention and are addressing the conditions of imprisonment and treatment of prisoners.
INTRODUCTION
In 2012 the International Committee of the Red Cross (ICRC) updated the *Water, Sanitation, Hygiene and Habitat in Prisons* handbook, first published in 2005. The intent of the handbook was to establish a common platform which would contribute to improving conditions of detention through guidelines for evaluating conditions of detention and to understanding the links between water, sanitation, hygiene and habitat.

The handbook contains practical guidance on the environmental aspects of prison accommodation and related services. While it focuses on technical detail, it recognizes that technical solutions and advice cannot be separated from other important aspects of the prison environment, including (but not limited to): how prison facilities are used; the amount of time detainees spend in the open air outside the accommodation area; and access to sanitary facilities.

The handbook was intended to fill a gap in the guidance/information available to ICRC staff, national authorities and the international community involved in providing detainee accommodation. It has been widely used to evaluate and assess prison infrastructure and to provide guidance in the design and construction of new and rehabilitated accommodation and sanitation services. It has also been used by national authorities as a reference when developing their own national guidelines and standards. Unexpectedly, and in the absence of detailed international standards, its specifications and guidelines have been widely quoted and sometimes mistakenly referred to as “standards,” particularly the specifications for floor space per person.

In October 2009 the ICRC convened a roundtable in order to take account of developments in the establishment of international guidance since the handbook was first published and issues that the handbook had not addressed. The former include the updating of the European Prison Rules and the emergence of standards from the work of the European Committee for the Prevention of Torture. The latter include additional considerations about the link between policy, including the purpose of imprisonment, infrastructure and management practices as well as the process for planning new prison accommodation, the use of detainees in maintaining plant and equipment and the needs of women and children. All these issues are raised regularly with ICRC delegates by national authorities.

The roundtable sought to develop more specific guidance on:

- accommodation space requirements in both normal and emergency conditions;
- the measurement of occupancy rates;
- the process for planning new prison accommodation;
- the use of detainees in maintaining plant and equipment; and
- the specific needs of women and their children.

It brought together experts from 18 countries, including chief executives of prison services, headquarters and operational officers, prison experts in post-conflict situations, scholars and private sector engineers. The diverse experience and backgrounds of the participants mirrored the wide range of environments in which the ICRC has undertaken programmes. This new publication, which is meant to be read in conjunction with the handbook and draws directly on the text and illustrations that it contains, reflects the views of the roundtable and of ICRC staff experienced in these matters.
HOW TO USE THESE GUIDELINES
The guidelines were developed to complement the Water, Sanitation, Hygiene and Habitat in Prisons handbook by providing additional information and enhanced specifications, particularly in relation to the accommodation found in the wide variety of prisons throughout the world.

The guidelines are intended to improve the overall understanding of the minimum conditions to be provided in order to guarantee that detainees are always accommodated in detention facilities which meet basic human needs. It is also intended that the guidelines be sufficiently comprehensive to be applicable in a wide range of environments.

Each issue is addressed by considering the reality of the situation and what is considered to be good practice. Chapters follow the format: “Reality” followed by “Good practice and operational implications.” The “Good practice and operational implications” section attempts to cover some of the realities in relation to each topic. However, given that the ICRC works in some 70 countries, it is difficult to reflect the reality and operational implications in each of the different environments. There are nevertheless some common factors: many prisons are poorly resourced and are without adequate facilities or financial and human resource capacities, while others are more adequately resourced but lack the necessary technical expertise. Most prisons face chronic or occasional increases in their populations beyond the capacity for which they were designed. For those detention environments with very limited resources, not all guidance provided will be applicable. For others the guidance will be too elementary and more sophisticated responses will be required.

Wherever possible, sections in the guidelines have been written to provide as much essential information as possible without the reader having to refer to other sections. Accordingly, there is some repetition of information.

It is important to note that illustrations of different prison designs are not presented as “standards” or ideals but have been included merely to illustrate the variety of solutions adopted in different countries.

The guidelines should be read in conjunction with the handbook Water, Sanitation, Hygiene and Habitat in Prisons, which can be accessed in English, French, Chinese and Arabic via the ICRC website http://www.icrc.org/eng/resources/documents/publication/p0823.htm. Where appropriate, the headings used in this document correspond to those in the handbook.

**Glossary**

**Prison**: Any place of detention accommodating pre-trial or sentenced persons of any class or security category. This includes all prisons of all security ratings.

**Detainee**: Any person accommodated in a place of detention, including those who are unconvicted, persons awaiting or undergoing trial, convicted persons, appellants and sentenced persons.

**Regime**: The routine and arrangements adopted within the prison to manage all or part of the prisoner population. This includes hours of operation, entitlements and privileges, services and opportunities available to detainees.

**Abbreviations**

**SMRs**: United Nations Standard Minimum Rules for the Treatment of Prisoners (1955)

**ICRC handbook**: Water, Sanitation, Hygiene and Habitat in Prisons handbook, ICRC
1. Architecture of a Prison
Prisons may be very different from each other in terms of their architecture but they should all include the same range of basic facilities and services designed to meet the material needs of the detainees and management requirements:

- buildings containing single or multiple occupancy rooms where detainees sleep;
- sanitary installations for personal hygiene: toilets and showers;
- laundry facilities for washing and drying clothes;
- outdoor areas, yards for outdoor exercise and sports grounds;
- kitchens;
- health-care facilities;
- visiting rooms or other places where detainees can meet their families;
- visiting rooms where detainees can receive legal advice in private;
- offices for the prison administration;
- prayer room(s);
- storerooms;
- workshops (for use by detainees and/or staff);
- classrooms;
- multi-purpose rooms;
- library;
- water and sewerage systems;¹
- staff accommodation and services;²
- areas where detainees may be temporarily segregated for the purpose of maintaining good order and discipline.

¹ Addressed in Chapters 4 and 5.
² Particularly in developing countries, accommodation may be provided for staff and their families. While this is not specifically addressed in this publication, it is appropriate to note that staff accommodation should comply with the relevant building codes when constructed and be properly maintained.

Figure 1 Example of a prison compound with a range of basic facilities and services
Reality
Prisons in use today are often old and in poor condition. Many have inadequate facilities and services, which present major challenges to providing humane conditions of imprisonment and safeguarding compliance with applicable national and international law, standards and guidelines. Some prisons have accommodation blocks with few buildings other than a kitchen and gate entry area. Visiting facilities, health clinics, workshops and classrooms and other necessary services are either not included or, where they are provided, are insufficient to meet the needs of the number of detainees accommodated in the prison. Areas within the prison are often not appropriately zoned. Buildings may be used without regard for the efficient and safe use of space and movement of people and vehicles. As detainee populations continue to increase it is common to find classrooms, workshops and other buildings and outside space converted to provide additional accommodation. Facilities built as temporary structures are often still operating years later despite being in poor condition. The physical security provided by the infrastructure is often weak.

Some facilities used as prisons were originally built for quite different purposes, for very different categories of prisoner than those currently accommodated or for very different regimes. The original purposes of those facilities range widely, from having been private houses to accommodation for workers, army barracks, hospitals or other government buildings. Some have never been structurally adapted and, even where building alterations have been undertaken, many facilities continue to present significant challenges for prison management with regard to their suitability as prisons and their ongoing maintenance.

Prisons which were built in rural areas or on the outskirts of urban areas are now surrounded by urban development or, conversely, are now located in areas that have been abandoned by the local population following the collapse of a nearby industry that was a source of income. In post-conflict environments, where prison accommodation has been destroyed, there may be pressure to build new prisons according to specifications which are familiar to external donors and invited advisers but which are inappropriate for the situation, customs and culture.

Decisions by governments to build new prisons and extend existing prison capacities have not always been taken on the basis of the availability of the necessary community infrastructure or supported by adequate funding for construction and equipment. Inadequate funding often results in compromises in the construction of essential service facilities. The budget allocation for maintenance is often either insufficient or non-existent. The effect of those decisions limits the ability of prison managers to meet national and international standards, reduces safety and security, diminishes the capacity to minimize the negative effects of imprisonment and militates against the effective reintegration of detainees into the community.

Good practice and operational implications

A. ZONING
At well-designed and well-managed prisons “zones” are established within which particular activities and functions are carried out. This applies to both the design of new prisons and the organization or reorganization of existing prisons. Zoning the prison can make for the safe, secure and efficient movement of detainees between areas within the prison. It is the responsibility of prison management to organize the prison routine to ensure efficiency of movement within and between zones. The use of zones and the buildings and access within and between zones should be described in the management plan or strategy.  

3 The management plan or strategy describes the overall operation of a prison. This is addressed in relation to new prisons in Chapter 2 but is equally relevant for existing prisons and should be a key reference document for the management of a prison.
Zoning facilitates the implementation of a “structured day.” The concept of a “structured day” sets out to replicate a “normal” day in the outside world by providing a range of activities which can be undertaken by each detainee on any one day: personal hygiene, work, education, recreation and contact with the outside world through (legal and family) visits, telephone calls and letters. The structured day is intended to contribute to maintaining safety and security within the prison as well as the effective reintegration of detainees into the community.

Zones generally fall into three categories:

- non-prisoner access zone;
- limited (controlled) prisoner access zone;
- general prisoner access zone.

The “non-prisoner access zone” includes areas used for staff as well as visitor and vehicular access to the prison.

To prevent escape and to ensure security in the prison, there may be one or more walls or fences around the prison building(s). An inner fence, often referred to as the internal security perimeter, restricts movement between the internal zones of the prison and the external perimeter wall/fence. This area is referred to as the “sterile zone.” The sterile zone is intended to increase security by denying detainees access to the area, thus limiting the possibility of their escaping by scaling the external wall or passing through an external gate. It also restricts detainees’ access to contraband items which may be thrown into the prison grounds from outside.

The “limited prisoner access zone” includes all service buildings (medical and health facilities, reception, workshops, stores, kitchens, visiting areas, etc.) which detainees can access while under supervision. Workshops should be separated from accommodation areas and be located where materials can be efficiently delivered and dispatched and security concerns addressed. Materials and equipment may be delivered manually or by vehicle, depending on design and resource constraints and security considerations. Workshops may also be provided for staff-only use and be located separately. It is good practice to provide sufficient workshops so that all detainees have opportunities to be engaged in either constructive work or vocational/job-based training or full or part-time formal education.4, 5

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4 The United Nations Standard Minimum Rules for the Treatment of Prisoners 1955 (SMRs): SMR 71 (3) “Sufficient work of a useful nature shall be provided to keep prisoners actively employed for a normal working day.”

5 SMR 71 (4) “So far as possible the work provided shall be such as will maintain or increase the prisoners’ ability to earn an honest living after release.”
Health clinic

Health and medical facilities, including a dispensary, are generally located separately from, but within easy access to, prisoner accommodation. They should be separate from other service areas such as workshops, programmes and visiting areas so that detainees can gain access to them even when staff remain outside these areas. The facilities should contain a sheltered waiting area where detainees can sit, as well as interview and treatment rooms where detainees can be interviewed and examined in private. Health and medical facilities should include office space for health and medical staff as well as prison staff. Provision should also be made for the confidential and safe keeping of detainees’ medical records. Detainees’ and other medical records should be kept separate from all other records as, unless the prisoner gives consent, these should be accessed by medical staff only.

Figure 4 Two examples of non-contact visiting sections

Non-contact visiting section

The specific location of the visiting section will vary according to the prison infrastructure and the principles and practice of the overall management strategy. However, visiting sections are typically situated near the front gate so as to enable efficient entry and to restrict visitor access to the internal areas of the prison. Contact visits, where visitors and prisoners can speak directly to each other without the presence of any barrier, should be the norm in prisons. Good practice requires that visiting facilities be of sufficient size and number to ensure that all detainees are able to receive regular contact visits for extended periods. The visiting section should include contact visiting areas suitable for family visits as well as legal and other professional visits. It should contain areas where children can play safely while their parents conduct a conversation. Wherever possible, waiting areas, including areas suitable for children, should be provided, as should access to toilets. Visiting and waiting facilities should provide shelter from the elements, as appropriate to the local climate. In the absence of a dedicated visiting facility, an open area immediately inside the prison gate may be designated a visiting location and chairs or other seating placed in the area during visiting hours. Low-risk detainees may be permitted to have visits immediately outside the prison gate.

Contact visits are the most common form of visits and should be the norm in all prisons. However, where non-contact visits are envisaged, both the visitor and the prisoner should be visible to each other and conditions should facilitate verbal communication. Non-contact visits may be used where visitors to prisons pose particular security risks, for example where a visitor has been observed attempting to pass drugs or other prohibited material to the prisoner. In non-contact sections, seating should be provided on both sides of the screen or barrier and seats should be installed on the visitors’ side of the non-contact section to enable small children to sit high enough to see the detainee. There should also be areas in non-contact visiting sections where people (both detainees and visitors) who are confined to wheelchairs can see and speak to each other.

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6 Visits between a visitor and a detainee that are conducted in an open area under supervision and permit restricted physical contact.

7 Visitors and detainees are separated by a physical barrier – a mesh or clear pane – and speak through a small opening in the barrier or by using a simple handset.
Teleconferencing is a form of non-contact visit that has become very acceptable to prisoners and their visitors in some circumstances, for example where the prison is located at too great a distance for the family to travel there regularly and in high security environments where security procedures are comprehensive. Teleconferencing has proved particularly acceptable when supplemented by less frequent but more extended opportunities for family visits, including visits lasting a number of days.

Legal visits should not take place in the same location as family visits since they are required to be confidential.

Classroom facilities
The “general prisoner access” zone includes sleeping accommodation, recreation and programme areas (classrooms and sports areas). Programme and recreational areas should be easily accessible from accommodation areas and should include work areas for staff. Certain types of workshops, classrooms, libraries/reading rooms and multi-purpose rooms are often located near visiting sections to allow efficient access by people who visit the prison to conduct programmes and deliver services. Toilets should be available for access by such visitors. Laundry, shower areas and toilets for the prisoners should be located within the accommodation areas and zones.
Vocational training workshops

Where a prison accommodates detainees of different security ratings, its design should ensure that all detainees have access to facilities in the general prisoner access zone, irrespective of their security rating. This has implications for the location of facilities within the prison. For example, locating facilities adjacent to external gates may be ill-advised if physical security and management arrangements in the area are insufficiently robust.

Prison administration facilities should be in a separate zone. This may be within the inner perimeter or outside the gate. Locating offices within the prison can increase management’s knowledge and awareness of what is happening and encourage greater contact between staff and detainees. Locating offices outside the prison wall may be necessary but in that case it is good practice to designate an internal office for regular use by management to meet with staff and interview detainees.

B. BUILDINGS

A well-designed prison has sufficient buildings to enable it to provide services that meet the needs of the number of detainees for which it was designed as well as the number of detainees which it currently accommodates. This applies to prisons of all security ratings: from maximum and high security to open or low security. The buildings and the range of services that they are designed to house, as stated in the section on “zones,” should be considered as a package to support the proper management and effective reintegration of detainees. It is widely accepted that successful reintegration is partly dependent on the opportunities open to a detainee while in prison. The availability of services depends to a large extent on the suitability of the buildings and how efficiently they are used. Multi-purpose rooms, including those without solid walls in tropical climates, can be constructed and used on a rotation basis as classrooms, hobby areas or visiting areas.

Where it is proposed to construct additional buildings within an existing prison (on sports areas or other “vacant” areas), planners should assess the impact that the proposed buildings will have on other buildings within the prison and on the services that can be provided. For example, the construction of buildings can interfere with airflow to the extent that existing buildings become uninhabitable, particularly in hot and humid climates. New buildings may reduce natural light below the minimum standard.

Failure to determine where the underground water and sewage infrastructure is located can mean that new buildings are constructed on top of those installations, a very costly error. Buildings constructed close to a perimeter may be unsuitable for prisoners with higher security ratings, thus depriving them of access to essential services.

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8 SMR 63 (2) “These institutions need not provide the same degree of security for every group. It is desirable to provide varying degrees of security according to the assessed risk and specific needs of prisoners. Open institutions, by the very fact that they provide no physical security against escape but rely on the self-discipline of the prisoners, provide the conditions most favourable to rehabilitation for carefully selected prisoners.”

9 SMR 11 (a) “The windows shall be large enough to enable the prisoners to read or work by natural light, and shall be so constructed that they can allow the entrance of fresh air whether or not there is artificial ventilation.”
C. EQUIPMENT

Physical security is complemented by providing sufficient equipment that is appropriate for both the environment and the proper use of the facilities and by ensuring the appropriate deployment of staff. The range and sophistication of the equipment will vary according to factors such as resource availability, the security level of the detainees whom the facility is expected to house and the overall management strategy.

Suitable lighting should be installed in all external areas, the secure perimeter, corridors and internal courtyards and around the external perimeter of the prison itself. The lighting should not be so powerful that it disturbs the sleep of either detainees or neighbourhood residents but must be sufficiently powerful to enable persons to be seen – but not necessarily identified – after dark. Where resources permit, the lighting should be complemented by hand-held industrial-strength torches.

Fire-fighting equipment should be installed and all prison staff trained in its use. Regular fire drills must be conducted. A routine maintenance programme covering the inspection and repair of all equipment is necessary, as is a system of accountability for equipment during and at the change of duty shifts.\footnote{Prison maintenance is addressed in Chapter 8.} Accountability systems may be simple notebook records which are routinely inspected and signed by a senior officer.
2. GENERAL DESIGN PRINCIPLES
This chapter deals with general principles governing the design of new buildings within and adjacent to existing prisons and the design of new facilities. It addresses these principles within the context of an effectively functioning prison and includes the question of the cost of expanding prison capacity, the development and purpose of a management strategy, the location of prisons and the impact of culture and climate on the design.

**Reality**

Growth in the use of imprisonment in many countries over the past 30 years has put enormous pressure on existing facilities, many of which were built at least 50 years ago. In both developed and developing countries, this sustained upward trend results from an increase in the numbers of persons being imprisoned and the increase in the average length of detention of both pre-trial and convicted persons. In response to this increased demand and the need to replace buildings which are no longer habitable, new facilities have been constructed.

Some prisons are well designed and built in suitable locations but others are poorly conceived for their environment and intended use. Plans developed in one country or in relation to a particular category of prisoners are often proposed as the basis for new prisons in other countries or contexts. This “copy-and-paste” approach has resulted in the building of prisons which are not appropriate to local conditions, good correctional practices or the needs and expectations of detainees or their families. A well-designed prison which, in one country, enables proper management of detainees and provides acceptable conditions of imprisonment may, when transposed to another country, provide an environment which is inhumane and unsafe. A prison that is well designed for one security category may necessarily limit access to people and services for another, thus hampering rehabilitation.

Experience has shown that where unworkable arrangements are incorporated into the prison design, staff and detainees develop and implement makeshift solutions to overcome deficiencies, particularly with regard to warmth and cooling (for example, blocking off or smashing windows). These arrangements are often unsafe. Makeshift arrangements may be introduced into cooking and food preparation areas, the organization and design of visiting facilities, single cells vs multiple occupancy accommodation, and the design and organization of medical/health clinics. As a minimum standard, the cultural, environmental and climatic conditions of each location and the special design adaptations that these may require need to be taken into account in the very earliest stages of sound planning and design.

Most governments struggle to give priority to the construction and rehabilitation of prisons and this lack of priority is reflected in the buildings and their location. Prisons with underground detention areas, accommodation areas with no natural light during daytime hours and those where the continuous use of artificial light does not allow a natural distinction to be made between night and day continue to be built. Buildings decay more rapidly than is necessary because routine maintenance is not carried out and this has an effect on prisoners and staff.

Financial cost is a critical factor in all countries. In countries which are resource-poor and have little funding available for public services, limited resources are generally allocated to the building, operation and maintenance of prison facilities. A costly backlog of repairs builds up because continuous attention cannot be given to regular and preventive infrastructure maintenance. This can overwhelm government funding. Continuous attention to regular and preventive infrastructure maintenance is vital, however, and less expensive in the long term. Existing prisons are often hurriedly modified and extended, with inferior materials being used and the new structures failing to comply with recognized good practice, particularly in post-conflict environments. All too frequently, the fuel available for cooking is not that for which the kitchen
area was designed. It is not uncommon to find smoke-filled, enclosed kitchens that were originally designed for some other fuel that is no longer available and is now replaced by – often wet – wood.

Deficiencies in the facilities also reflect a lack of clarity about the purpose of imprisonment among those responsible for renovating existing prisons or for planning and constructing new prisons. This results in buildings where essential services cannot be provided at all or only partially and with great inefficiency. Diffusion of responsibility for the planning process among government ministries or shortcomings in the consultation of and oversight by different professional units can also contribute to flaws in the design, especially when coordination between the internal government departments is weak.

Good practice and operational implications

A. THE QUESTION OF COST
An increase in the number of people detained pending trial or serving terms of imprisonment tends to be the result of both political decisions which define offences and determine prescribed sanctions and measures and a poorly functioning court system rather than an increase in crime. Political decisions affect access by accused persons to legal advice, define offences and determine the measures and penalties that can or must be imposed. The existing prison capacity may need to be expanded as a logical consequence of insufficient legal services, creating new offences, increasing minimum and maximum penalties, limiting access to community-based penalties and making custody mandatory. It is vital for governments to recognize these connections. Governments should consult prison authorities on the implications of legislative policy and budget changes relating to imprisonment. Similarly, prison departments have an obligation to inform and advise governments on the consequences of law and order policies, particularly where policies and relevant legislation are likely to result in the detainee population exceeding the capacity of the prison system and in increased costs.

Where the size of the detainee population or a projected sustained increase is likely to cause a deterioration in the prison service’s ability to meet minimum standards for security and humanity, it may be appropriate for prison authorities to make representations to the government to have the total number of detainees reduced through mechanisms which divert both pre-trial and convicted persons from prison. Such mechanisms may include providing advice on access to different forms of bail, reviewing the legal status of detainees, facilitating applications to reduce the time to be served prior to release, converting part of a custodial sentence to community supervision or commuting sentences (for example through an amnesty). These prison-based mechanisms need to be complemented by changes in the criminal justice system.

Mechanisms to reduce detainee numbers may not be favoured for political reasons (perceived as unacceptable to the public or incompatible with the government’s political platform) or technical reasons (for example, the lack of a system to provide support for and oversight of released detainees). In this case, it may be appropriate for prison authorities to seek an increase in capacity through the expansion of existing facilities or the building of new prisons. Common wisdom, according to which “it is not possible to build one’s way out of an overcrowding crisis,” almost always prevails. Nonetheless, in some circumstances new prisons will be needed, for example to replace prisons that have become so decayed that no amount of renovation can provide adequate conditions of detention. Where an expansion of the prison’s capacity is proposed, prison department officials have a responsibility to advise governments of the adequacy or otherwise of the budget allocated for planning and design processes and construction and ongoing operation and maintenance of the prison. Good practice requires advance preparation of a comprehensive budget, an adequate budget committed when the decision to build is taken, and capital and ongoing operational funding. Cost does not justify compromising the design of a prison to the extent that it does not meet the minimum provisions of international standards, security or the basic needs of detainees.
A number of donors offer funds for prison construction. Care should be taken by decision-makers not to accept conditions involving solutions that are inconsistent with the local culture and environment and/or where the availability and affordability of local resources and material is not taken into account, thus rendering the prison unsustainable. For example, where replacement parts cannot be sourced from within a country at an affordable cost, the equipment in need of repair is likely to remain out of operation from the time it first fails. This applies to vehicles, security and operational equipment. The more appropriate approach is to seek locally applicable and acceptable solutions that reflect international standards.

B. MANAGEMENT STRATEGY AND PURPOSE OF THE PRISON

The management strategy should guide the overall development of all aspects of a prison and its preparation should precede any drafting of building plans. It should provide sufficient detail for the design team to have a clear understanding of the proposed day-to-day operation of the new or extended prison. A management strategy should also be prepared where the buildings are to be used for purposes other than those originally intended or where there is to be any change of operations in an existing prison, including transfers of large numbers of prisoners from existing prisons. It should be a readable, succinct yet comprehensive document. The strategy should specify:

- the philosophy underpinning the purpose of the prison;
- the methods of prisoner management to be used, including the security concepts and supporting systems;
- the number and type of detainees;\(^{11}\)
- the proposed range of programmes and activities;
- the hours of operation;
- the management structure;
- the ratio of staff to detainees;
- the facilities required for staff.

This information should provide support for the design of the buildings and their site. The form and physical layout will be based on the range and type of buildings, their purpose, the functional relationship of buildings to each other, and the flow of movement of detainees, staff and all others entering the prison (e.g. visitors, those providing programmes, those responsible for transporting prisoners and goods, workmen).

The strategy should be developed by a multidisciplinary team led by prison management practitioners and policy experts, including psychologists, social workers, health professionals, prison programme and prisoner employment experts, engineers/architects with prison design expertise, prison security experts and so on. Very often a building department or similar unit is responsible for developing the strategy although it has little or no knowledge about the proper operation of a prison. The team leader should be a senior member of the prison department and the team should report to the head of department and the government minister responsible for the prison department. A steering committee at ministerial level may be established for this purpose, particularly where there are several different departments involved, although responsibility for approving the management strategy should remain with the prison department. Team members should be knowledgeable about the provisions and application of relevant international instruments.\(^{12}\) They should also be familiar with the provisions of national legislation and local authority regulations. The team should take account of the budget and the purpose of the prison in relation to existing prisons.

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\(^{11}\) SMR 63 (3) “It is desirable that the number of prisoners in closed institutions should not be so large that the individualization of treatment is hindered. In some countries it is considered that the population of such institutions should not exceed five hundred.” In other countries the same standard is applied to each housing unit within a very large prison complex or in some cases of multiple institutions within the same perimeter or estate.

as well as any stated government intent concerning the use of the prison. If an ICRC delegation is present in the country, this is an area in which it may be able to provide expert advice.

C. CULTURAL CONSIDERATIONS
The local culture is a fundamental factor which must be taken into account and not interpreted incorrectly. Building designs must reflect cultural preferences and behavioural norms. For example, the United Nations Standard Minimum Rules (SMRs) provide that single cell accommodation is the standard. However, in some cultures accommodation in a single cell is regarded as inappropriate and even punitive and there may be a cultural preference for shared accommodation. In these environments, a range of multiple occupancy cell sizes are appropriate (accommodating between 2 and 50 people) with a small number of single cells provided to allow for the separation of detainees in exceptional circumstances. A preference for shared accommodation should not in any way be construed as reflecting a preference for community housing density or used to justify detention in crowded conditions.

The concept of “privacy” varies between different cultures and according to population density. The concept of privacy in a specific culture or the crowded living conditions characteristic of a local community cannot be used to justify reducing the specified minimum accommodation space (3.4 m²) for each detainee. On the other hand, the need for and benefit of privacy must not be confused with the use of solitary isolation for security reasons (see Chapter 3).

D. CLIMATIC CONSIDERATIONS
Materials used in prison construction and maintenance must be appropriate for the local climate. It is also important to ensure that hardware selected for use in a specific climate can withstand the prevailing weather conditions. Materials and equipment designed to function in temperate climates may not function as intended when installed in environments with more extreme temperatures, regular sandstorms or tropical rain. This is particularly applicable to electronic equipment, which may not be designed to withstand strong, sand-bearing desert winds, while metal corrosion is a greater problem in coastal, tropical and sub-tropical climates.

Heating and cooling designs must take local climatic conditions into account and reflect local knowledge of specific regions. The design of prisons to be built in the tropics must take account of the region’s heat and humidity and the need for cross draughts, which may not be included or reflected in plans for prisons built in temperate climates. Prisons built in desert conditions need to take the extremes of temperature into account and provide both heating and cooling.

Where heating arrangements have been included in the prison design, it is important to ensure that the system is appropriate for the circumstances. Heating systems need to use a fuel that is regularly available at an acceptable cost. A system based on oil or electricity when neither is regularly available or affordable will prove unworkable.

Outdoor exercise areas should be adapted to the environment. In hot climates, some shade should be provided to protect detainees from the sun. In hot, humid countries, a roofed area which is properly drained should be provided to enable it to be used during heavy rain and the monsoon season. In cold climates, exercise areas should be protected from the wind and rain.

While prison designs may be inspired by designs from other regions, care should be taken to ensure that local climatic conditions are taken into consideration.

13 SMR 9 (1) “Where sleeping accommodation is in individual cells or rooms, each prisoner shall occupy by night a cell or room by himself. If for special reasons, such as temporary overcrowding, it becomes necessary for the central prison administration to make an exception to this rule, it is not desirable to have two prisoners in a cell or room.”
E. FLOW OF STAFF, DETAINEE AND VEHICULAR TRAFFIC WITHIN THE PRISON

The flow of traffic through a prison should contribute to its efficient and proper management. The flow should give detainees easy access to health services, visiting sections, work and programme areas, outdoor exercise areas and other services. It should be calculated on the basis of the total number of detainees and staff within the institution and reflect the way the prison is to operate, as described in its management strategy.

Whether existing prisons are to be modified or new prisons built, planners should be advised of the proposed supervisory regime and ensure that the design supports the management approach. A direct supervision model requires staff offices to be located within accommodation blocks which allow for staff security and detainee access. A management strategy which requires detainees to work a normal day (6-8 hours), have visits at least once a week, exercise daily, attend rehabilitation programmes, etc. should describe traffic flow arrangements which allow large numbers of detainees to move around the prison at the same time. Corridors should enable the efficient movement of detainees and staff. Narrow corridors which allow only small numbers of detainees to move between locations inevitably lead to limited access to services.

Design features which enable efficient access by staff and detainees throughout a prison contribute to its safety and security by reducing the potential for unrest which occurs when staff and detainees are repeatedly frustrated by the prison’s physical design.

Provision should be made for vehicular traffic which needs access to delivery and collection points, including detainee escorts, kitchens and workshops, waste collection, maintenance and emergency responses (e.g. ambulances, fire engines). The vehicle zone should be separate from detainee traffic areas. It should provide one entry and one exit but allow turning space for vehicles. The design should include a sallyport arrangement which allows vehicles to be searched in a secure area and acts as a barrier to escape. In many locations, vehicles are unable to enter the prison. In those circumstances, materials have to be delivered and waste collected by manual cartage arrangements (bins, trolleys, carts, etc.) at areas outside the prison walls.
F. MAINTENANCE

It is important that those responsible for managing, planning and/or constructing prisons fully appreciate the need for ongoing maintenance. They should consider the availability of materials and equipment and technical skills and prepare a maintenance budget which includes an allocation for the prison’s first year of operation. In summary, planners should design a prison that can be maintained without exceptional difficulty and not a prison for which replacement equipment and materials and technical knowledge are neither locally available nor affordable. Chapter 8 deals with maintenance in more detail.

Maintenance facilities

Figure 12  Operation and maintenance – diagram showing the range of infrastructure services required
3. LIVING QUARTERS AND CAPACITY
This chapter deals with the accommodation space required for each detainee in normal conditions, the requirements in emergency conditions and the total space required per person. It includes a discussion on the range of elements and other factors that must be considered when assessing space requirements. Technical terms which are frequently used in connection with occupancy are defined and their application described.

A. ACCOMMODATION SPACE PER PERSON IN NORMAL CONDITIONS

Reality

Detainees live in widely differing environments, ranging from living alone in single cell accommodation to living in shared cells, rooms shared with a few others and dormitories with large numbers of detainees. While some prisons have adequate space for the detainees, it is unfortunately more common for accommodation areas to be severely overcrowded.

At one end of the scale are cells, rooms and dormitories which have no furnishings and where detainees lay down mats or other material (if available) to sleep on. In many of those prisons the available floor space is insufficient for all prisoners to lie down at the same time; they have to take turns. If sleeping berths are provided, they may be on one level or on several levels as double or triple bunk beds. The accommodation space may also be used for cooking, washing and working (e.g. at weaving looms) because there is no separate space for the different activities and functions. The lack of separate facilities may occur because the building(s) being used as a prison was/were designed for a different purpose or operated as a prison with a very different purpose or regime.

At the other end of the scale, detainees are accommodated either in single cells which have a bed, shelving, toilet, shower and washbasin or in dual and multiple occupancy rooms and dormitories which have beds and shelving with separate toilet and shower areas within the accommodation area. Detainees have sufficient room to move around and to store personal property and clothing.

In some prisons, different categories of detainees are allocated to different standards of accommodation. This may sometimes reflect, among other things, social discrimination or corrupt practices.

There is no universal standard for detainee accommodation space.14 However, some organizations and fora have made recommendations affecting various groups of countries, for example:

The Kampala Declaration on Prison Conditions in Africa 1996 states that detainees “should have living conditions which are compatible with human dignity” and that conditions in which detainees are held “should not aggravate the suffering already caused by the loss of liberty.”15

Principle XII of the Inter-American Commission on Human Rights (IACHR), Resolution 1/108, Principles and Best Practices on the Protection of Persons Deprived of Liberty in the Americas, states that “persons deprived of liberty shall have adequate floor space, daily exposure to natural light, appropriate ventilation and heating, according to the climatic conditions of their place of deprivation of liberty. They shall be provided with a separate bed, suitable bed clothing, and all other conditions that are indispensable for nocturnal rest.”16

14 SMR 10 “All accommodation provided for the use of prisoners and in particular all sleeping accommodation shall meet all requirements of health, due regard being paid to climatic conditions and particularly to cubic content of air, minimum floor space, lighting, heating and ventilation.”
16 Ibid.
In the absence of universal standards, national standards have been developed by numerous countries but they vary widely. For example, standards in Europe range from 4 m² in Albania to 12 m² in Switzerland. Some jurisdictions prescribe greater space for pre-trial detainees, others specify greater space requirements for women (for example, Iceland, Poland and Slovenia), and others still differentiate between adults and juveniles (for example, Hungary and Latvia). ¹⁷

In South America, Chile specifies 6 m², which includes a single bed, a shower, a washbasin, a desk and a shelf. In Guatemala, there are three types of cells: individual cells measure 11.52 m², cells for three measure 20.68 m² with an average of 6.98 m² per person, and collective cells for 37 prisoners measure 276.35 m² with an average of 7.46 m² per person. The dimensions include space for toilets and showers. These minimum space requirements are not enshrined in law or regulations.

In Africa, dormitory accommodation is the norm. In Kenya, the minimum space requirement is 40 sq ft (3.7 m²) per prisoner. In Senegal, no minimum space is specified but an internal study showed that the average floor space is 3.55 m² per person, the cubic capacity being 5 m³. In Mauritius, the per capita space requirement is 8.75 m² in a single cell, 4.08 m² in dormitories for 20 people and 5.58 m² in a hospital ward.

The reality is that in many developing countries space requirements have yet to be established. In those where minimum standards have been established, they are routinely compromised as a result of increasing prison populations.

The American Correctional Association has published *Standards for Adult Correctional Institutions*, which prescribe space provisions in terms of unencumbered space for single cell occupancy (35 sq ft/3.25 m²) and multiple cell occupancy (25 sq ft/2.32 m²).18 Many jurisdictions cite other variables such as hours of confinement per day and the extent of supervision as factors which are relevant in determining sufficient space. In Australia, the state of Victoria specifies 8.75 m² for a single cell with a shower and a toilet, 6.5 m² for a single cell without a shower or a toilet and 12 m² for design-built double occupancy cells.19

The European Prison Rules (EPR) do not specify minimum space requirements. However, the Commentary on the EPR refers to the European Committee for the Prevention of Torture (CPT).20 The CPT considers “an absolute minimum requirement of 4 square metres for prisoners in shared accommodation and 6 square metres in a single cell” to be applicable in all circumstances but qualifies this by saying that the minimum in a particular set of circumstances may be greater, depending “on the quality of the space and the amount of time that prisoners have to spend in their cell.”21 The Commentary adds that “although the CPT has never laid down such a norm directly, indications are that it would consider 9 to 10 m² as a desirable size for a cell for one prisoner.”22

**Technical specifications**

In the absence of a universal standard, the ICRC, based on its experience in many countries over more than 60 years, has developed specifications concerning space requirements. These are detailed in the *Water, Sanitation, Hygiene and Habitat in Prisons* handbook and are further refined in this section.

The ICRC does not set minimum standards. Instead, it establishes **recommended specifications** on the basis of its experience. The application of these specifications is dependent on the actual situation in a given context. At the same time, the ICRC would not expect the recommended specifications to be used to reduce more generous allocations of space for detainees.

The ICRC has calculated the space needed for sleeping on a bed as 1.6 m² and toilet and shower space as 1.2 m². It recommends the following specifications as the minimum space needed for a detainee to sleep undisturbed, store personal property and move around. Toilet and shower space is not included. The original specification was 3.4–5.4 m²/person. The Roundtable however found it to be more appropriate to specify a minimum space for single cell accommodation and for multiple accommodation as the starting point of any evaluation of space requirements.

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18 “Unencumbered space is usable space that is not encumbered by furnishing or fixtures ...” American Correctional Association, Adult Correctional Institutions, Fourth Edition, 2003, p. 36.
Single cell accommodation: **5.4 m² per person**

- Single occupancy
- 5.4 m²
- Excludes toilet facilities

Shared or dormitory accommodation: **3.4 m² per person**, including where bunk beds are used

- Multiple occupancy
- 10 detainees
- 3.4 m² per detainee (total area: 34 m²)
- Includes toilet facilities

**IMPORTANT:** These figures are recommended minimum specifications. They are not standards.

**BUNK BEDS**

There is very little documentation on how to calculate the per capita space requirements when bunk beds are installed. However, the use of bunk beds is primarily intended to maximize the open floor space available to detainees. On this basis, the space requirement can be calculated using a minimum of 3.4 m² per person (including 1.6 m² bed space) in shared accommodation.

In a four-person cell where single beds are used, the cell would measure 13.6 m² (3.4 m² per detainee × 4, including 1.6 m² for each bed). In a four-person cell where two double bunk beds are used, the cell would measure 10.4 m². The calculation is made

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by deducting the space for two single beds (1.6 m² x 2) saved by having double bunks from the total area needed by four people sleeping in single beds (13.6 m²). While bunk beds take up less overall cell space, in both cases the available open floor space for four people, excluding the bed space, is the same, i.e. 7.2 m².

**IMPORTANT:** These figures are recommended minimum specifications. They are not standards.

Specific space provisions are simple measures which are attractive to practitioners and policy-makers. However, *in practical terms the amount of space required by a detainee cannot be assessed only on the basis of a specific area measurement.* A number of other factors contribute to the assessment of space requirements, including management factors and the facilities and services available in the prison. This comprehensive approach provides a more accurate picture of the reality for detainees and staff. It serves to underline the fact that all aspects of space and its use are interrelated and a variation in one factor will affect other factors and the quality of the individual detainee’s prison experience.

**Other factors relevant to determining the space required**

As previously mentioned, space alone is a limited measure of the quality of life and conditions of detention. As such, it is merely a starting point when evaluating the conditions in which detainees are held. Space norms cannot be specified separately from the total environment. The appropriateness of the ICRC’s recommended specifications in any given situation will depend on a number of other factors including:

- the specific individual needs of, for example, sick, old or young prisoners, women and/or people with disabilities;
- the physical condition of the buildings;
- the amount of time spent in the accommodation area;
- the frequency and extent of opportunities to take physical exercise, work and be involved in other activities outside the accommodation area;
- the number of people in the accommodation area (to allow a degree of privacy and avoid isolation);
- the amount of natural light and the adequacy of the ventilation;
- other activities being undertaken in the accommodation area (e.g. cooking, washing, drying);
- other services available (e.g. toilets and showers); and
- the extent of supervision provided.

**A. PHYSICAL CONDITION OF THE BUILDINGS**

The buildings and external areas used by staff and detainees should be “fit for purpose” and contribute to meeting the basic needs of detainees such as adequate shelter, food, sleep, warmth and cooling. The infrastructure must provide a safe environment, regardless of where the prison is located and the resources available. Infrastructure includes safe electricity and water systems. The following should be developed and implemented at all prisons:

- a risk and needs assessment programme;
- individual management plans;
- policies and procedures relating to the use of the facilities and equipment;
- staff training programmes on relevant procedures; and
- a comprehensive maintenance plan.

The risk assessment programme should reflect the reality of the situation with regard to buildings, space and other resources.

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24 Ibid., Chapter 1.3.
25 SMR 10 “All accommodation provided for the use of prisoners and in particular all sleeping accommodation shall meet all requirements of health, due regard being paid to climatic conditions and particularly to cubic content of air, minimum floor space, lighting, heating and ventilation.”
B. AMOUNT OF TIME SPENT IN THE SPACE

The longer a detainee is held in a confined accommodation space in any 24-hour period, the greater the amount of space he or she will require. The approved prison regime should specify the amount of time a detainee will spend daily outside the space where he or she sleeps. The Standard Minimum Rules specify that each person “shall have at least one hour of suitable exercise in the open air daily.” This minimum one-hour period is in addition to time spent engaged in other activities outside the accommodation area.

The more hours a detainee spends engaged in positive activities in a safe, secure environment outside the accommodation area each day, the greater the possibility of mitigating the negative effects of close confinement for both the detainee and staff. “Positive activities” include work and education, meeting visitors, engaging in organized exercise or sport, spending extended periods of unstructured time in outdoor exercise areas, and participating in hobbies and recreation programmes.

The ICRC is aware that there is a wide variance between countries in recognizing, and responding to, the negative effects of overcrowding. In some countries, detainees held in densely crowded conditions are permitted to spend 8-12 hours outside accommodation areas. In other, similar environments, detainees remain locked in accommodation areas for 23 hours a day, even where outdoor space is available. These different practices reflect different levels of human resources and procedural conduct expected of staff. They also reflect beliefs, often erroneous, about the purpose of imprisonment and about the levels of control needed to guarantee security for detainees, staff and the general public.

An additional factor may be the capacity of the prison management to provide sufficient positive activities and services to maintain relative harmony in the living quarters. The design of the facilities can also have a positive or negative influence on the options for reducing the negative effects of overcrowding (for example, where toilets and washing facilities are provided, in-cell staff have the theoretical option of avoiding moving detainees from one space to another; if there is no available space where a number of detainees can gather, it is an objective fact that there is nowhere else for them to go to experience some relief from the effects of overcrowded accommodation).

Experience has shown that to reduce the negative effects of overcrowding, prison management should be open to approaches which may appear counter-intuitive. For example, instead of aiming for full-time employment of a small number of detainees, it may be better to operate two or more shifts in the workshops, allowing far greater numbers of detainees to be employed for at least a few hours a day. Other examples include rotating access to sports activities, library facilities and study and recreation areas; instituting a system of detainee committees which requires detainees to take some responsibility for organizing recreational, sports, educational and vocational activities; and increasing the frequency and/or duration of visits.

C. NUMBER OF PEOPLE IN THE SPACE

The number of people who can comfortably live in a particular cell, room or dormitory will vary according to a range of factors, including those cited in this chapter. The larger the number of people in the accommodation space, the more possibilities there are for tensions which can lead to prison unrest, particularly where there is limited, indirect staff supervision and detainees are allowed to assume inappropriate supervisory responsibilities. Larger numbers also result in increased noise, which may be an aggravating factor that contributes to tension within the area. Increased numbers can also compromise the capacity of management to maintain acceptable standards of cleanliness in the accommodation and ablution areas and have serious negative effects on the physical and psychological health of detainees.

26 SMR 21 (1) “Every prisoner who is not employed in outdoor work shall have at least one hour of suitable exercise in the open air daily if the weather permits.”
27 SMR 28 (1) “No prisoner shall be employed, in the service of the institution, in any disciplinary capacity.”
In general, no more than 40-50 persons should be accommodated in a room where detainees sleep and then only when the available space, ventilation and lighting meet specifications. The ICRC has observed that where this number is exceeded, it becomes increasingly difficult for detainees to access essential services (such as toilets and water). It also becomes difficult to ensure the safety of all detainees without compromising minimum standards.

In addition to the total number of detainees in a space, their specific health issues must also be considered. Detainees with an infectious disease should be separated from non-infected persons during the contagious period. They may be accommodated in a separate section of a prison hospital/health facility or in a separate area within the accommodation block. The latter option may be preferable where the prison hospital is overcrowded or does not provide adequate separation from non-infected detainees. Contagious detainees should not remain in shared accommodation in which non-contagious persons are housed.

When designing space, account should also be taken of other matters such as detainees' age (particularly to reflect the need for children of both sexes to take physical exercise) and gender (particularly if women detainees may be accompanied by small children).

D. ACTIVITIES CARRIED OUT IN THE SPACE

The range of other activities carried out in the accommodation area has a bearing on the adequacy of the space allocated to each person. Cooking, laundry and ablutions should not be undertaken in an accommodation area but rather in specially designed and designated spaces.

Food preparation, cooking and laundry should be undertaken in areas that are set apart from the accommodation area. However, in reality these activities are sometimes carried out in accommodation blocks because the designated facilities are insufficient, security restrictions make them insufficiently accessible or detainees need to keep control of their possessions for fear of loss (particularly in the case of food provided by families). In this case, additional space per person should be provided and separate spaces allocated for each of the different activities. Where food is allowed to be kept in accommodation areas, it should be placed in suitable containers which keep out insects and rodents, and climatic conditions should be adequate for its preservation. Shelving may be more suitable than floor-level storage.

Where detainees need to keep possession of their clothes, it may be preferable for them to launder and dry them in or near their accommodation area. In such circumstances, additional, well-ventilated space is needed. Prison yards or areas adjacent to accommodation blocks could be used for washing and drying clothes.

As a general practice, detainees should be permitted to keep some personal items in storage space around or under the bed. Items which can be stored there include clothing, reading and writing materials, personal correspondence, photographs, small hygiene articles, etc.

Providing storage space is a major challenge for management, particularly in overcrowded conditions. However, experience shows that where suitable storage is not provided, detainees will create makeshift arrangements, for example by fashioning hooks and inserting them into walls or using window sills and floor space as shelves. Hooks often result in vermin accumulating in the holes in the wall, while the use of window sills can interfere with ventilation and reduce the amount of natural light entering the area. Providing organized storage space can also simplify the task of maintaining security.

29 SMR 17 (2) "All clothing shall be clean and kept in proper condition. Underclothing shall be changed and washed as often as necessary for the maintenance of hygiene."
E. LIGHT AND VENTILATION

Natural light is necessary for maintaining physical and mental health. The total size of windows and openings in a cell (or accommodation area) should be no less than 10% of the floor space. Windows should allow detainees to see part of the external environment. Where the open ventilation provided has not been designed in a way that is appropriate for the climate and detainees’ living spaces become too cold, it is common practice for detainees to shut out the cold air by blocking the spaces. These blockages interfere with both ventilation and natural light. Similarly, where cooling is inadequate detainees may break sealed windows to create airflow.

Design solutions to address these problems include:

→ installing louvres and grilles which correspond to the minimum requirement for access to daylight and can be opened and closed by detainees and/or staff to allow airflow; the casings and louvres should be built from industrial-strength materials and the louvres should be built so that they cannot be removed;
→ installing mechanical vents such as roof-mounted exhaust fans and/or interior ceiling-mounted fans; and
→ installing roof mushrooms.

There should be sufficient natural light to enable detainees to read during daylight hours. Artificial lighting should not be kept on 24 hours a day in areas where detainees sleep. A lighting schedule which respects the hours of night and day and enables sleep without artificial lighting should be implemented. While staff may be able to override the operation of lights, control by detainees should be the norm.

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30 SMR 11 (a) "The windows shall be large enough to enable the prisoners to read or work by natural light, and shall be so constructed that they can allow the entrance of fresh air whether or not there is artificial ventilation."
F. SERVICES AVAILABLE IN THE SPACE

Clean drinking water must be available from a tap or a container continuously 24 hours a day. Sufficient water points should be installed throughout the prison to ensure that water is freely available. Where necessary, staff and detainees should be provided with water purification facilities or materials.

Minimum water allocations are based on observations during emergency events, including population displacement, and are described in humanitarian standards such as the Sphere Standards.

Irrespective of climatic conditions, every detainee needs 3-5 litres of drinking water each day. This allocation does not include water for laundry, cleaning or general ablutions. The minimum amount of water needed for drinking, cooking and personal hygiene is 15 litres per person per day. In countries where the water supply is satisfactory, the normal average ranges between 50 to 300 litres per person per day.

Showers and personal washing areas must be sufficient to provide for basic hygiene. As a minimum, the ICRC recommends one shower per 50 detainees. However, this recommendation must be treated with caution as it assumes that detainees can access shower areas at any time. Where the management strategy and daily regime provide restricted access to showers and where different groups of detainees are to be accommodated in separate areas, the number of showers should be increased so that detainees can shower within the more restricted time periods during which the facilities are available to them.

No less than one toilet per 25 detainees should be provided. Toilets should be in or near the accommodation cell or block. Detainees should be able to use toilets 24 hours a day irrespective of whether access is unimpeded or given on request. All toilets should be in working order with cleaning agents available at any time.

These issues are addressed in greater detail in Chapter 4.

G. SUPERVISION

Prison management has an obligation to ensure the safety of the public, all staff and detainees and to provide services which meet the basic needs of detainees. As the number of detainees in a space increases, it becomes more difficult to maintain a safe and secure environment without adjusting routines and arrangements.

The supervisory regime should be prescribed in the management strategy. Supervision may be either direct or indirect. Whether the regime is one of direct supervision (a key component of dynamic security characterized by trained staff working in close proximity to and interacting with detainees), indirect supervision (for example, security patrols, observation booths or towers, video surveillance) or a mix of both, the number of staff must be sufficient and in sufficient proximity to ensure the safety and security of all detainees in the accommodation area 24 hours a day.
Irrespective of the type of supervision, it is important that staff behave in accordance with a set of formally approved supervisory procedures. These procedures need to be sufficiently comprehensive to maintain the safety and security of staff and detainees and to maintain the minimum conditions of detainees’ imprisonment and treatment. The procedures should include the capacity to respond to any emergency in a timely manner. Staff should not delegate supervisory responsibilities to detainees, especially in relation to discipline and sanctions.37

There are no universal standards governing staff numbers. However, practice has shown that where there is a relatively high staff-to-detainee ratio and where the number of people in the space being supervised is relatively low, detainees and staff are less likely to be assaulted, disputes are less likely to escalate to violent confrontation, personal safety is more effectively maintained, vandalism is reduced, access to services is better managed, the risk of infectious disease being spread is reduced and conditions for prisoners can more closely resemble normal life, something which is essential to rehabilitation. The ICRC has observed that in direct supervisory regimes where trained staff work in close proximity to detainees and where there are adequate numbers of staff to fulfil their roles, the environment is generally safer and more secure for both staff and detainees.

The professional and human qualities of staff are as important as their numbers. As well as having an impact on security, the attitude of prison staff towards detainees makes a difference to the other aspects of each detainee’s experience of imprisonment. Staff who recognize the specific problems that arise from detainees being closely confined, often for lengthy periods each day, and act on that awareness appropriately and using the resources at their disposal can assist in alleviating problems inherent in imprisonment. Examples include:

→ supporting/approving routine, additional or extended family visits;
→ permitting adequate time for laundry and showering;
→ ensuring equitable food distribution;
→ implementing an effective system for routine and emergency medical care, including the dispensing of prescribed medication;
→ receiving detainees’ requests and complaints and responding to each one as soon as practicable, making practical decisions based on what is possible and on the fundamental aims of imprisonment. For example, requests for additional reading/education materials should be considered favourably, given the importance of constructive activities to maintaining good order in the prison;
→ encouraging detainees to improve their behaviour, positive living skills and preparedness for release.

Supervisory staff bear responsibility for verifying detainees’ need to access services within the accommodation area (for food, medical care, etc.). Detainees may be involved in the organization and distribution of some services (although, particularly in the case of medical services, this must only be done in a manner that does not compromise confidentiality and the individual detainee’s right to privacy). However, the staff retain responsibility for overall supervision on the basis of their “duty of care,” which includes preventing the development of power structures among detainees, protecting the vulnerable and ensuring equity.

37 SMR 28 (1) “No prisoner shall be employed, in the service of the institution, in any disciplinary capacity.”
B. TOTAL SPACE REQUIREMENT

**Good practice and operational implications**

Space requirements can be calculated on the basis of the total prison area to which detainees normally have access. These areas or zones (see Chapter 1) include workshops, programme rooms, exercise areas and yards, recreation areas, visiting areas, health clinics, chaplaincy areas and any other part of the prison accessible to detainees as part of their normal, daily routine. They do not include staff security areas, staff training facilities or other areas not normally accessible to detainees.

The ICRC specifies a total space requirement of **20–30 m²** per person. This range is provided because, whereas detainees normally have access to all parts of their accommodation space, they do not necessarily have access to all other areas. The assumption underlying the calculation is that an effective prison will have a number of spaces where a range of services and opportunities can be accessed by the majority of detainees. Therefore, any figure below 20-30 m² should be examined closely to ensure that there are sufficient facilities and services in the prison and that they are available to sufficient numbers of detainees for the prison to be fulfilling important roles in addition to a mere indirect security function.

C. ACCOMMODATION SPACE IN EMERGENCY SITUATIONS

**Reality**

Emergency situations are sudden events of short duration. They may be caused by a political crisis, natural disasters, fire, riots, health crises in which large numbers of detainees need to be separated from the others or events which require the transfer of detainees from a prison that has been damaged to another prison.

Emergency situations can have an impact on the accommodation available in a prison and, if unresolved, can turn into long-term, chronic situations. Prison overcrowding can occur, for example, when accommodation is lost and cannot be quickly replaced and the same number of prisoners have to be accommodated in a smaller space, or when there is a sudden increase in the overall number of detainees. These situations generally require management responses which differ from those where overcrowding occurs as a result of a steady increase in detainee numbers over a lengthy period of time or when demolition or refurbishment of an old building forms part of a strategic building plan.

**Good practice and operational implications**

It is inevitable that when space is suddenly lost, an immediate consequence will be less accommodation available per person. Participants in the ICRC's October 2009 Roundtable were of the opinion that in such crises no arbitrary minimum space per person should be specified. This Roundtable was unanimous in recommending that the ICRC specification of 2 m² in emergency situations be rescinded. Rather than specifying a minimum standard, it recommended that guidance be provided for returning a prison to normal conditions (including minimum space specifications) as soon as possible. Immediate management of emergency situations should set out to avoid the development of situations of chronic deficiency.

By definition, emergency arrangements should apply for short periods only. Good practice requires prison authorities to recognize that emergencies do happen and to prepare, have in place and implement contingency plans, which include returning the prison to normal conditions in a timely manner.

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39 The figure of 2 m² for emergency situations was included in the first version of the ICRC handbook, *Water, Sanitation, Hygiene and Habitat in Prisons*, but has been removed from the most recent edition, published in 2012.
The ICRC recognizes that, in the immediate aftermath of an emergency, the primary focus of authorities is to address safety and security and to meet basic humanitarian needs. Following this phase, the objective should be to return the prison to normal operations, including, but not confined to, recommended space specifications (see Chapter 3, Section A. Accommodation space per person in normal conditions, Technical specifications). To do this, it may be necessary to relocate detainees, install pre-fabricated accommodation units and/or reorganize the use of existing buildings.

Increasing the hours during which detainees are confined to cells and dormitories is a frequent response to the increased density and overcrowding that can accompany emergencies as well as management prioritization of safety and security. To ensure humane conditions and a steady return to normal operations, however, a range of options should be considered at the outset. These include increasing the time spent outside accommodation blocks, work availability and the frequency and/or duration of visits by family and friends as well as improving ventilation and the provision of natural light. Increasing the hours during which detainees are locked in accommodation areas has few positive effects, particularly if tension and anxiety among prisoners and staff are already high. On the other hand, making small changes to the supervisory regime and daily routines to increase detainees’ access to other sections of the prison and to the outside world can reduce tension and stress and mitigate the negative impacts of close confinement.

D. OCCUPANCY DEFINITIONS

The official capacity (or design capacity) of a prison is the “total number of detainees that it can accommodate” while respecting minimum requirements (including a full range of services), specified beforehand, in terms of floor space per inmate or group of inmates” including the accommodation space. The official capacity is generally determined when the prison is constructed. It is a figure which is known, used and quoted by prison authorities although the prison and its designation may have changed several times and its rationale may no longer be known and the original floor space per person not readily discernible. In order for the figure to be of any practical use, the basis of the calculation should be known and the figure updated when relevant changes to the prison fabric are made.

Most jurisdictions have determined the total capacity of all prisons within their country. These are published under World Prison Brief on the International Centre for Prison Studies (ICPS) website. However, as the “space per person” is calculated according to each country’s standard or accepted measure, the percentage of overcrowding recorded on the website should be read with caution. For this and other reasons, comparisons between data of different jurisdictions are not necessarily useful.

Caution should also be exercised when using “capacity” data to make comparisons within a jurisdiction. For example, a prison may be described as having a capacity of 2,500 detainees, calculated on the basis of a specified figure (e.g. 3.4 m²). However, there may be variations in the space per detainee in different accommodation areas, just as there are variations between prisons and in the bases on which their capacity was originally calculated.

Where additional accommodation is built or the use of buildings changed, the capacity should be recalculated. The official capacity should take into account the access to and adequacy of other prison infrastructure (services, programmes, activities, etc.), not only approved beds. Clearly the desired capacity should influence decisions made at the planning and design stage.

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40 ICRC, Water, Sanitation, Hygiene and Habitat in Prisons, ICRC, Geneva, Chapter 1.3.
The occupancy rate, also known as population density, is determined by calculating the ratio of the number of detainees present on a given day to the number of places specified by the prison’s official capacity.\textsuperscript{42}

\[ \text{Occupancy rate} = \frac{\text{Number detainees present}}{\text{Official capacity}} \]

The occupancy rate is most commonly referred to when the extent of overcrowding is discussed. However, as with the “official capacity,” comparisons between jurisdictions should be used with caution because the space allocated per detainee varies widely. For example, a prison which allocates 3.4 m\textsuperscript{2} per person will have a population density that is twice that of a prison which allocates 6.8 m\textsuperscript{2} per person; however, the former would not be classified as overcrowded because it complies with official specifications.

Notwithstanding this caution, historical comparisons of the occupancy rate within a prison system can provide useful information for future planning and discussions with government and other organizations about trends in imprisonment, conditions of imprisonment (including critical situations) and responses to these.

\textbf{Operational capacity} refers to the total number of persons who can be safely and humanely accommodated in a prison at any one time. This figure may alter over time as changes are made to the prison and as resources fluctuate. For example, additional beds (including bunk beds) may be installed, buildings may be converted for accommodation or the number of beds may be increased by using floor space allocated for other purposes such as education or programmes. In such circumstances, the daily regime needs to be adjusted to compensate for the reduced total space per person (which in any case should not fall below the minimum recommended, except in emergencies). This may include giving detainees more time outside accommodation areas and better access to services by increasing the operating hours of, for example, laundry and bathing areas, health and education centres, visiting areas and/or recreation areas.

The concept of “operational capacity” provides prison management with a reference point with which the prison should operate and above which the prison population should not rise. Proximity to the operational capacity limit is an indicator that prison management should act at two levels:

- Government: management should act proactively by bringing the situation to the attention of the government. The government can stimulate debate on the purpose and cost of imprisonment and put the need for additional funds and expansion of the prison system on the political agenda.
- Prison management: prison managers should review the appropriateness of their regime and routine and identify appropriate changes which ensure that minimum standards are maintained.

\textbf{Emergency capacity is a percentage above the official capacity} which cannot be exceeded because beyond this the institution becomes unsafe to operate. Emergency capacity should not be maintained for a long period of time because it can create tension among staff and prisoners and prevents the prison from providing all the services expected. In practice, prison authorities determine the extent of overcrowding which can be tolerated on a non-permanent basis without affecting the safe operation of the prison.

\textsuperscript{42} ICRC, Water, Sanitation, Hygiene and Habitat in Prisons, ICRC, Geneva, Chapter 1.3.
4. WATER SUPPLY AND HYGIENE MEASURES
This chapter deals with the infrastructure requirements for effective and efficient water supply, operational considerations concerning access and distribution, and emergency water distribution and storage.

**Reality**

A continual supply of water is required for the health and welfare of both detainees and staff to be maintained. The positioning of water points and improving access to water points for laundry and hygiene purposes are issues which are regularly discussed between ICRC delegates and prison managers. Where there are few water points and/or staff supervision is weak, there is increased opportunity for detainees to control access and charge for the use of and access to water. Conversely, multiple water points can improve detainee access but diminish its value as a resource and lead to waste and even damage from leakage.

Locating water points in or near accommodation areas minimizes the amount of time detainees spend outside a normally confined space. If water points are located some distance from the accommodation areas, this can limit or prevent access unless management allocates sufficient staff (where supervision is necessary) and/or allows a longer time for detainees to get to and from the water supply.

Providing an adequate supply of water for drinking, preparing meals, washing utensils, personal hygiene, sewage disposal (in water-based evacuation systems) and cleaning can be extremely challenging for prison authorities. This may be the result of any number of factors, including inadequate planning and design; inadequate or poorly maintained infrastructure; large numbers of detainees and increases in the number of detainees; the high cost of delivering a sufficient supply, particularly during the dry season in hot climates; interference with the water supply; lack of a maintenance budget; and/or payment of fees to local authorities.

In the process of designing new prisons, it is common for there to be a mismatch between the size of the external supply pipes in the community water system and the size of pipes specified for the prison. This error is often realized belatedly and is costly to rectify. For example, the prison’s design may provide for 20 showers but the water supply capacity is insufficient to channel water to each shower at the same time. Similarly, an improvement in the water supply so that additional quantities are provided to meet the demand must take into consideration the capacity (limits) of the evacuation system.

Changes to the environment since the water delivery system was designed and/or installed can affect supply. Urban expansion may mean that a prison which was built in a rural area is now surrounded by housing in an increasingly dense neighbourhood with its own demands for water and sanitation services. Consequently, water pressure and the amount of water reaching the prison may be reduced. It is not uncommon for local communities and prison staff living in government accommodation in those communities to siphon off water through illegal joints. Prisons may also have originally been located alongside industries that guaranteed a water supply but those industries may have long ceased to operate or been relocated.

External supply pipes may be damaged and only makeshift repairs carried out, resulting in continued seepage. In prisons, damage to water supply points, taps, pipes and sanitary facilities occurs frequently, far more frequently than anticipated by those unfamiliar with prison environments. The causes are many, including:

→ prison management failing to carry out timely and appropriate maintenance, using poor quality and/or non-durable materials, using poorly trained and/or inadequately remunerated staff and detainees;
→ deliberate vandalism, sabotage or dismantling of plant by detainees;
→ the high number of detainees using the equipment;
→ improper use of equipment as a result of poor supervision or inadequate leadership and control by staff.
Water may also be contaminated at multiple points during the delivery process, both in and out of the direct control of the prison administration, including at source, through supply pipes and infrastructure materials, through storage containers being improperly maintained or through contaminants seeping into the supply system. Water supply systems that do not operate continuously are frequently contaminated during periods when the pipes are empty and without pressure, allowing infiltration of contaminants to occur.

**Technical specifications**

The following specifications recommended by the ICRC must be read with caution. Other factors must be considered when determining the appropriateness of specifications. These factors include the period during which the equipment or facility is accessible to a given number of detainees, the climate and the adequacy of ventilation.

**Infrastructure**
- Number of taps: 1–2 taps per 100 detainees
- Minimum rate of flow: 3–5 litres per minute

**Supply (minimum amounts of water)**
- 10–15 litres per day (to cover all needs)
- 3–5 litres per person per day for survival (hot or cold environment)
- 1 litre per person per day for washing after using toilets

**Water storage**
- Total minimum storage capacity: consumption for one day, including kitchen and dispensary. (Where water is distributed from the mains supply on alternate days in different neighbourhoods, the number of days between distributions must be taken into account.)
- Storage capacity for the night: 2 litres per person available in each cell, room and dormitory. Buckets, jerry cans and plastic bottles provide suitable storage.

**Good practice and operational implications**

Ensuring that the quality and quantity of the water supply is adequate and meets World Health Organization standards is a priority responsibility of management. Prison managers must ensure that drinking water and water for all other purposes is free of charge and freely available to all detainees. It is never acceptable to deprive detainees of access to water as a means of control, for punishment or for purposes related to interrogation. Prison managers have a specific responsibility to ensure that vulnerable groups, including women and children, those suffering from mental and physical illnesses or whose health care requires specific hygiene regimes, the old, people with disabilities, those under restricted regimes (e.g. in punishment cells, held in segregation while awaiting confirmation of death sentences or execution, or segregated from the majority of the prison population for other reasons), have access to adequate quantities and quality of both drinking water and water for hygiene purposes.

**A. INFRASTRUCTURE, INCLUDING STORAGE**

Those designing water and sanitation systems should visit water supply systems in other prisons within a similar region and investigate how they are managed. They need to bear in mind that the demands on installations within prisons are very different from those in a normal domestic environment. Water and sanitation facilities need to be sufficiently robust to withstand the high level of use in an institutional environment and prison institutions differ from other institutions in several respects. Designers and planners often underestimate the amount of use and the consequent wear and tear that will occur. Standard domestic fittings (particularly taps, basins and toilets) often need frequent replacement because of their high levels of use or because they have

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43 ICRC, Water, Sanitation, Hygiene and Habitat in Prisons, ICRC, Geneva, Chapter 2.5.
44 SMR 20 (2) “Drinking water shall be available to every prisoner whenever he needs it.”
been deliberately or accidentally damaged. While institutional and industrial-grade products are more expensive, in a setting where durability is essential they are more economical in the long term.

It is essential to develop and implement a regular maintenance schedule for all water distribution installations, including shower areas. Long-term overcrowding is not unusual, puts greater demand on the fittings than planned and can further accelerate the rapid deterioration of prison infrastructure (including water and sanitation) compared with domestic settings. In overcrowded conditions it is therefore necessary to increase maintenance services.

The implementation of a maintenance schedule requires funding. Maintenance budget requirements should be included at the planning stage and thereafter submitted during the annual budget process, reflecting any anticipated increase in the size of the prison population. Where unplanned growth in numbers is significant, supplementary maintenance budget requests should be submitted. Some savings may be made by involving trained and supervised detainees in maintaining the institution’s infrastructure. However, management’s responsibility for the welfare of detainees requires appropriately qualified staff, rather than detainees, to have overall responsibility for the upkeep of the water supply and distribution system (see Chapter 8, Prison Maintenance).

Notwithstanding the ICRC specification of 1-2 taps per 100 detainees, the number of taps required to ensure that all detainees are provided with adequate water for drinking, washing and cleaning will be influenced by the configuration of the facilities and approved operational routines. For example, more taps will be needed when operational routines give detainees restricted access to wet areas (areas where water is provided).

The ICRC recommends a minimum flow of 3-5 litres per minute. Determining the quality of materials to meet this flow rate, as well as installing water supply pipes, pumps and other equipment, should be part of the planning and design process. Planning teams should also consider new, alternative technologies such as rain harvesting, solar pumps and locally made ceramic filters which are relatively inexpensive and readily available. Cost-benefit analyses should include initial installation costs, maintenance and repair costs and the local or other availability of material and technical expertise. New technologies may require investment in time and money initially but provide cost savings in the longer term and prove more reliable than conventional methods. Nonetheless, alternative solutions must be carefully evaluated to ensure that they are understood, reliable throughout the year and fully meet the objective. Initial enthusiasm will often lead to unrealistic expectations. It is advisable to test these options on a small scale as pilot projects or to visit sites where the technology is being used successfully.
B. SUPPLY, QUALITY AND AMOUNT OF WATER AND ACCESS TO IT

The basic principles for determining where to locate water points include the following:

→ detainees need access to drinking water 24 hours a day. Where security, logistics or other legitimate issues make it impossible to provide 24-hour access to running water, portable storage containers which can be sealed to prevent contamination should be supplied and made available within accommodation areas;

→ water purification equipment/materials should be available to staff and detainees wherever it is not possible to provide sufficient access to already treated drinking water. Up-to-date and regular analysis reports by a recognized laboratory must confirm that the results meet the World Health Organization standards;\(^{45}\)

→ designated access points must reflect the requirement to separate men from women and juveniles from adults in accommodation areas. (Timed access by different groups of detainees to one water point is not advised as this practice frequently leads to insufficient access by one or more groups.);

→ the location of water points should be based on the planned use of each building and area, including staff areas, both inside and outside the prison;

→ total consumption must reflect reality and include not only the needs of the detainees but also those of all other consumers such as accompanying children, visitors and staff (especially if the latter are living on the premises with their families because of the remote location of the prison);

→ sufficient water points must be installed throughout the prison to ensure that water is not a scarce commodity able to be controlled by a small group of detainees. The ICRC is aware that establishing specifications can lead to perverse outcomes. For example, installing running water within a cell block can result in detainees being given less time outside the cells because they no longer need to leave the accommodation area to access external water points. Similarly, the more water points there are, the greater the likelihood of water wastage as a result

of misuse of taps or lack of maintenance. However, it is important that perverse outcomes be avoided through good operational management and oversight and the constant reminder that the aim is to improve overall conditions of imprisonment, not just small, albeit vital, elements;

- a “buffer” stock (i.e. reserves of water such as ground reservoirs or water towers) must be maintained as part of the water system in order to cover the needs of detainees and staff for a minimum of 24 hours should the normal system fail.

**Water and the local community**

It is usually possible for the local community to tap into the supply lines carrying water to the prison or for water to become (either intentionally or unintentionally) contaminated at source or along its route. The water supply demand for the prison must be included in a calculation covering all consumers, i.e. including the surrounding population. Practical measures to avoid problems such as these and to resolve issues about the water supply with neighbouring residents include:

- constructing, as part of the building programme, additional and separate piping or another installation (such as a well or a tank) to increase supply to the local community;
- installing collection systems and storage reservoirs to accumulate water overnight when demand from the surrounding community is lowest.

**Water supply and new and expanding prisons** (This topic is further addressed in Chapter 9.)

Where existing water supply systems are to be expanded or a new prison built, the planning team must be familiar with the relevant legislation and local authorities’ rules and administrative procedures. New prisons should be located in areas where an adequate water supply can be accessed at reasonable cost.

Where expanded capacity is needed, the first step is to assess the state and capacity of the prison’s current supply and distribution system. While this may seem obvious, it is not uncommon for donors or providers to have preferred systems and, as a result, overlook potentially more cost-effective, sustainable arrangements. There are many examples of prisons built with ad hoc, supplier-driven systems which do not provide sustainable, long-term solutions.

Planning should take into account the potential expansion of both the prison population and the surrounding community and the capacity of the water supply system to meet any increased demand. Planners should be aware that the financial investment necessary to upgrade the capacity of existing distribution networks or to build new water treatment plants is extremely expensive compared with the initial cost of installing a system which can be adapted to service an increased population. Installing a water supply system which cannot be expanded to meet greater need will almost certainly result in significantly higher overall costs in the long term. The system and its configuration should therefore not be at its limit at the time of construction.

Water supply for a large prison often requires extensive negotiation with all relevant local authorities and the local community. Consequently, from the earliest stage, the planning process should include consultations with these groups and the outcomes should be conveyed to the planning team.

The objectives of the consultation process should include determining the right to access and secure the water supply and the equitable sharing of water resources with the affected community. The process may involve obtaining higher-level approval from government departments and, on occasion, the intervention of the head of government. Agreements with local authorities should be detailed in a legal contract. Any inspections of design specifications, fittings and technology prescribed by local authorities should be carried out.
Meetings with the community immediately surrounding the prison should explain the impact of the prison on the local water supply, even when the prison is expected to have no impact. In large prisons it may be economically feasible to increase the size of the water supply system sufficiently to benefit the surrounding community. Where an equitable arrangement with the community is not reached or maintained, experience by ICRC delegates indicates that its members sometimes illicitly siphon off water to meet their own needs and may sabotage the water supply.

If all avenues of negotiation are exhausted without guaranteeing a supply of water to the prison, planning for the prison should not proceed.

C. EMERGENCY WATER DISTRIBUTION

Even in the most well-designed, well-managed prison the water supply can be disrupted. It is not an infrequent occurrence, particularly in conflict, post-conflict and developing countries where there are known weaknesses in the supply and distribution systems. Access to water is one of the predictable triggers for detainee unrest. If the supply is not restored quickly, detainees can become disruptive and damage property as they attempt to access water. It is essential that prison management be ready and able to respond rapidly to restore or replace the water supply.

To provide water when the normal system fails, a “buffer” stock (i.e. reserves of water) should be kept to cover the needs of detainees and staff for a minimum of 24 hours. Contingency arrangements with relevant local authorities should be developed for the delivery of water in situations where standard and buffer stocks are inadequate.

Where water is limited because of seasonal variations or other factors, equitable distribution should be provided through contingency arrangements which are made known to staff and detainees. The rationing system must be managed in such a way as to ensure that the sick, the elderly, nursing mothers and children are not prevented from having access to sufficient water to meet their daily drinking and hygiene requirements. Regular table-top and in situ exercises should be conducted to ensure that the emergency water plans are effective when implemented.

Although it is costly, additional or replacement water may be provided temporarily by water tanker delivery or as bottled water.
5. SANITATION AND HYGIENE
Reality
Achieving effective, basic sanitation is a major challenge in many prisons. It is not uncommon for staff and detainees to be unfamiliar with the proper use of latrines. Toilet areas become sources of disease because of limited knowledge about the importance of regular and proper cleaning and the way diseases are transmitted. Lack of funding, poor facilities and sanitation infrastructure which is inadequate for the number of detainees are factors which contribute to this challenge.

Toilets and other sanitation facilities are the visible part of the liquid waste evacuation system. Overflowing sewage caused by blocked or inadequate drains is frequently seen in prisons. The causes may be inadequate infrastructure, incorrect flushing of the system after periods of water shortages or, in some cases, deliberate sabotage. It is common for blockages to occur in septic tanks and filtration soak pits, the end points of the system.

Blockages may result from solid objects being discarded in the evacuation system, often when detainees are not given sufficient appropriate cleaning material and use foreign objects such as stones, clothes or other solid materials. Blockages also occur when the septic tank is too far away and the piping system needed to reach it is made up of too many elbow pipes with too many changes of direction. It would be better and cheaper in the longer term to build an additional tank closer to the area.

Septic tanks are places where organic matter is broken down biologically and from which liquids, removed from solid matter, are evacuated either to a soaking pit or a municipal sewage system. However, they are frequently built as retention tanks, which need to be emptied.

Other problematic situations observed by ICRC delegates include septic tanks built in locations which do not enable them to be emptied (e.g. vehicle access blocked by narrow paths or security walls) and extensions which have been built on top of septic tanks.

Problems which occur underground are usually the hardest to resolve. Unblocking or carrying out repairs can be difficult when the location of the evacuation pipes is unknown, particularly in old prisons where modifications have been made to the system but not recorded. In other situations, cost-saving measures may have resulted in there being insufficient manholes to allow inspection.

Prison managers need to have knowledge of the prison’s hidden infrastructure so that they can properly administer contracts to repair or maintain the sanitation systems.

Prison sanitation arrangements need to be organized in such a way as not to cause conflicts with or problems for the local community in the area around the prison.

Technical specifications

► Toilets: 1:25 persons. A minimum of one toilet should be provided for each accommodation area that houses up to 25 detainees. Where single cells are provided, each cell should contain a toilet. In multiple occupancy cells or dormitories, some cultures will be accustomed to having a much higher number of toilet and shower fixtures.

► Showers: 1:50 persons – 3 showers per week (minimum and according to local climatic conditions)

► Taps in latrines: 1 for each toilet block for washing hands

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ICRC, Water, Sanitation, Hygiene and Habitat in Prisons, ICRC, Geneva, Chapter 2.5.
Good practice and operational implications

A. INFRASTRUCTURE

The minimum specification of one toilet for every 25 detainees assumes that they have unrestricted access to the toilet area. Toilets should be in or near the accommodation cell or block with 24-hour access being either unimpeded or provided by staff on request. Toilets should be in working order and cleaning agents readily available.

In some circumstances the ratio of toilets to detainees may need to be varied. For example, 1:25 may be operationally unmanageable where prisoners are accommodated in single cells that do not contain toilets and where the doors are locked most of the time. In that case, more toilets will be necessary to ensure that detainees have access in accordance with international standards. The appropriateness of the ratio must be considered with regard to the amount of time available for individual detainees to access the toilets and the frequency of access provided.

Where staff escorts are required for detainees to access toilets – for example, in accommodation blocks where prisoners have been assessed as presenting a high risk or being at risk themselves – toilets and washing facilities for personal hygiene should be installed within cells and cell blocks. Where this is not economically or practically feasible, a system should be introduced which allows detainees to access toilets whenever necessary. This can involve, for example, instructing staff to respond to an agreed signal from the prisoner and providing sufficient staffing to make a sufficiently frequent staff response possible. In lower-level security blocks, where detainees have unrestricted access to toilets, these may be separate from the sleeping areas. In any event, the proximity of toilets and showers to accommodation should be such that there is access at any time. Ensuring that detainees have access to toilets requires special attention to be paid to staff deployment, office arrangements and supervisory routines throughout a 24-hour day.

Toilets must be culturally appropriate, that is, the same as commonly used in the community. The location and partitioning of toilets should provide detainees with the maximum possible level of privacy. Prisoners using toilets should not be in full view of other detainees. A system of flushing or sluicing the toilet immediately after use should be installed and maintained. Should the flushing system fail, contingency arrangements which are known to staff and detainees should be implemented. A regular cleaning and maintenance programme is required to maximize the life of the infrastructure, particularly when materials which can be easily broken have been used.

The ICRC recommends one shower per 50 detainees. However, as with the minimum specification for toilets, this recommendation must be treated with caution. One shower will not be sufficient for every 50 detainees where operational routines and the time allowed for each detainee to take a shower are inadequate. For example, assuming a minimum of 5 minutes for each detainee to undress, wash and dress, more than 4 hours is required to complete the showering process where there is one shower for every 50 detainees. The specification assumes that a long period of time is allocated for each person to shower and therefore for overall access to the shower. Where different groups of detainees are accommodated in separate areas, it may be necessary to increase the number of shower heads per group of up to 50 prisoners.

Shower and bathing areas must provide for basic hygiene. Planners and managers must also ensure that shower areas and arrangements offer privacy and safety for prisoners, particularly those most vulnerable. Without adequate privacy, detainees will create

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47 SMR 12 “The sanitary installations shall be adequate to enable every prisoner to comply with the needs of nature when necessary and in a clean and decent manner.”
49 SMR 13 “Adequate bathing and shower installations shall be provided so that every prisoner may be enabled and required to have a bath or shower, at a temperature suitable to the climate, as frequently as necessary for general hygiene according to season and geographical region, but at least once a week in a temperate climate.”
makeshift arrangements to protect their basic dignity. Without adequate risk assessment practices and staffing arrangements, prisoners will not be safe. Possible configurations include those indicated below.

B. WATER SUPPLY, HYGIENE AND SANITATION

The water supply must be sufficient to provide an adequate flow of water to showers and toilets throughout the day, particularly at times of heavy demand. The peak periods for shower and toilet use are likely to be in the morning, soon after “wake-up” or “unlock,” and again at “lock-down” or when the prisoners go to sleep. Water flow must be sufficient for the expected prisoner capacity during peak times.

Water points should be established throughout the prison at locations which ensure that detainees have easy and frequent, preferably continuous, access for purposes of hygiene, sanitation and hydration. Soap should be provided for both personal use and general cleaning, together with adequate amounts of other cleaning agents and equipment, including buckets and mops.

Hygiene promotion should be a standard component of detainee education and instruction. Instruction should include the relationship between basic hygiene and disease transmission and living in a crowded environment. Detainees may be trained to deliver these sessions as part of detainee orientation programmes but they should be supervised by health staff or persons from external agencies (including non-governmental organizations).

C. TOILET CLEANING

Cleaning toilets and surrounding areas should be regarded as essential work in prisons. Toilets are most effectively maintained when the task of cleaning them is specifically allocated to a team of detainees. (Use of detainee labour is further addressed in Chapter 8.) Detainees who have cleaning duties should be provided with sufficient equipment and materials, including protective clothing where this is necessary, and be permitted access to the area throughout the day to ensure that cleanliness is maintained. They should be given clear, specific instructions on hygiene standards by health staff. Cleaning equipment and materials should be kept in locked storage areas. Detainees who are engaged in such work should be given the time and facilities to wash and change.

Staff should make sure that foreign objects, including plastic bags, stones and other debris, are not placed in latrines or toilets. Any indication that toilets are blocked or that the sewage system is not working properly should prompt immediate investigation before the situation deteriorates and presents a risk to the health of staff and detainees.

D. ACCESS TO SANITATION AREAS

Time to access sanitation areas to wash and to do laundry should be allowed in addition to the minimum standard of one hour per day in the fresh air.

E. MANAGEMENT OF WASTE WATER

Costly problems occur if installations are not managed according to design specifications. For example, septic tanks should only be emptied every one to three years when the content of semi-solid organic matter reaches one third of the height from the bottom. However, when the time comes to empty the tanks, contractors often only remove the liquid portion because it involves less work and puts less strain on their pumping equipment. Removing only the liquid eventually leads to complete clogging of the tank. Prison maintenance staff should be aware of this practice and supervise the work of contractors to ensure that septic tank waste is properly removed. Because there are misconceptions concerning septic tanks, prison maintenance staff should educate relevant persons about their management and maintenance.

50 SMR 15 “Prisoners shall be required to keep their persons clean, and to this end they shall be provided with water and with such toilet articles as are necessary for health and cleanliness.”
Alternatives to the traditional septic tanks have been successfully built in some prisons using biogas systems. The main advantage of biogas systems is that they treat effluents more effectively and over a longer period of time. They also provide an additional source of energy in the form of flammable gas, which can be used in kitchens, thus reducing the operational costs of cooking.

Biogas options require careful evaluation to ensure that there is local knowledge of the systems. Construction of the units must meet high quality standards, which local contractors may not be able to achieve. Specific knowledge and skills are needed to operate and maintain these systems. An evaluation of such systems was carried out in Nepal and provides useful information.\textsuperscript{51}

Scale drawings of the water and sewage system, both above and below ground, must be available to prison management if maintenance and repairs are to be carried out efficiently and cost-effectively. Whenever alterations are made or a new facility is built, the contractor should provide all relevant authorities, including the prison authorities, with plans of the water and sewage system. The location of these plans should be known to prison management.

When an increase in the prison population is being considered, prison management should consult the relevant local authorities and obtain advice (including costings) from technical experts on the potential impact of the increase on the local sewage system.

A routine sewage maintenance programme supported by necessary funding is essential. Maintenance should include immediate attention to dripping taps and leaking pipes. Relevant, local waste-water management laws or regulations should be followed. Detainees may be trained to carry out the maintenance but they should be supervised by staff. (Use of detainee labour is further addressed in Chapter 8.)

F. MANAGEMENT OF MEDICAL WASTE

Health-care activities are aimed at protecting health, curing illness and saving lives. The activities involved in achieving those aims generate waste, which may lead to infection, trauma or chemical or radiation exposure.

Although the risks associated with hazardous medical waste and the ways and means of managing that waste are comprehensively described in the literature and relatively well known, the best practice treatment and elimination methods require considerable technical and financial resources and a legal framework. These are often lacking in the contexts in which the ICRC works. As a result, national authorities are often ill-equipped to deal with hazardous medical waste.

Poor waste management can jeopardize the safety of care staff, employees required to handle medical waste, patients and their families, and the neighbouring population. In addition, the inappropriate treatment or disposal of that waste may lead to environmental contamination or pollution. In unfavourable contexts, the risks associated with hazardous medical waste can be significantly reduced through simple and appropriate measures.

Given the complexity of the effective management of medical waste, readers are referred to the ICRC publication *Medical Waste Management 2011* for the complete text and data sheets (available in French and English).
6. WOMEN, GIRLS AND DEPENDENT CHILDREN
The general provisions contained in this document and the handbook which it supplements also apply to women. The provisions of the section on children\textsuperscript{52} apply to imprisoned girls\textsuperscript{53} and to dependent children imprisoned with their mothers. This chapter focuses, from the point of view of water, sanitation, hygiene and habitat, on the special needs of women and girls as well as on those of dependent children imprisoned with them. Providing for those special needs should not be regarded as discriminatory but rather as an attempt to ensure gender equality.\textsuperscript{54} Some issues covered in this chapter, for example those relating to placement and visiting facilities, also apply to male prisoners with parental responsibilities, particularly men with sole parental responsibility.

**Reality**

Worldwide, the overwhelming majority (an average of around 95\%) of people in prison are men. The majority of prison buildings and systems are designed and organized by and for men.

Where separate women’s prisons exist, they are seen as expensive, considering the relatively small number of women that they house and the relatively small risk that women are perceived as posing to society. When national resources for prisons are already stretched, economies are sought; there are therefore fewer women’s prisons, which often results in many women being detained far from their children, other family members and friends. The additional staff and other resources required to meet even a minimum of women’s specific needs often mean that women in prison have access to fewer mainstream services and resources for education and physical recreation than men.

In many countries women are accommodated in a section of a prison for men. This poses challenges in terms of protection, privacy and movement to and from existing basic services such as bathing and laundry.

Furthermore, the provision of services that meet women’s particular needs – such as those relating to reproductive health, of which there may be little knowledge or understanding – is often a low priority, as the women form a minority. Women compete with the far greater male population for resources on the same site.

It is common for insufficient space to be allocated to women, in particular with regard to external recreation areas, and for the location of facilities not to have been thought through with regard to women’s needs. Where, in breach of international standards which require that children be accommodated separately from adults, girls are accommodated with women and where women (and girls) are living with dependent children, the absence of services that respond to special needs is a particularly significant problem.

The fact that States have failed to apply the international standards concerning equal treatment of women detainees and that the standards themselves were insufficiently explicit on the characteristics and needs of women in prison was recognized with the adoption by the United Nations, in 2010, of supplementary guidance, the Bangkok Rules.\textsuperscript{55}

It is acknowledged that, in view of the great variety of circumstances worldwide, not all

\textsuperscript{52} A human being under the age of 18, in accordance with the UN Convention on the Rights of the Child.

\textsuperscript{53} See, for example, Rule 37 of the United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders (the Bangkok Rules), referred to hereafter as the Bangkok Rules or BR: “Juvenile female prisoners shall have equal access to education and vocational training that are available to juvenile male prisoners.”


aspects of the Rules can be implemented immediately. However, they offer important guidance as to the conditions to which prison services should aspire and should be referred to when plans are being drawn up or reviewed and changes contemplated that could have a positive or negative impact on women's accommodation and access to facilities.

Good practice and operational implications

A. ACCOMMODATION

Women may be accommodated either on a completely separate site or in a women's building entirely separate from, but on the same site as, a men's prison. A completely separate site is recognized as preferable, not least because this allows for a building design that reflects the usually low levels of security risk posed by women. International standards encourage open conditions and community-based options.

Where resources do not immediately allow the women's prison to be located on a separate site, the design and location of the premises and facilities used by women should still reflect their usual low-risk classification as far as possible while not compromising their gender-specific needs with regard to safety and privacy, hygiene and health, adequate care for any accompanying children, maintaining contact with family members (particularly children) and successful reintegration into the community on release. Consideration should be given to locating women in the community when the available prison accommodation and services constitute a risk to the safety and health of women and their dependent children.

The design of the facilities for women, including zoning, should enable women to sleep and to have regular and safe access to water for drinking, cooking and washing, to food preparation areas, toilets, showers, laundry, health care, programme areas and recreation (including physical recreation) and allow them to meet lawyers and family members under the supervision of female staff and without making physical, visual or aural contact with male detainees.

The possibility of male detainees coming into contact with female detainees during an emergency should be minimized. Procedures for evacuating the prison, or parts of the prison, should envisage separate emergency exits/routes for men and women or, where this is the only option, the early evacuation of women to a pre-determined, safe and separate location.

B. SAFETY

Walls separating women's quarters from men's quarters should be solid and not allow visibility or other unauthorized or unwelcome communication (for example, insulting and threatening verbal communication) between the sections. Buildings and boundaries separating male and female detainees should be sufficiently robust to prevent any access to the other side and should be regularly inspected. Additional security routines and procedures which recognize and complement the physical security structures should be implemented. For example, access routes and staffing patterns should be so organized as to strictly limit access to women's quarters by male staff at all times and to ensure that where there is a need for a male staff member to enter the women's section/prison, he can always be accompanied by a female staff member. Particular care should be taken in places of pre-trial detention. Mirrors should not be used to

56 SMR 8 (a) "Men and women shall so far as possible be detained in separate institutions; in an institution which receives both men and women the whole of the premises allocated to women shall be entirely separate."
57 BR 45 "Prison authorities shall utilize options such as home leave, open prisons, halfway houses and community-based programmes and services to the maximum possible extent for women prisoners. " See also the United Nations Standard Minimum Rules for Non-custodial Measures (the Tokyo Rules).
58 BR 41 "The gender-sensitive risk assessment and classification of prisoners shall: (a) Take into account the generally lower risk posed by women prisoners to others, as well as the particularly harmful effects that high-security measures and increased levels of isolation can have on women prisoners."
59 SMR 53 (2) "No male member of the staff shall enter the part of the institution set aside for women unless accompanied by a woman officer."
60 BR 56 "The particular risk of abuse that women face in pre-trial detention shall be recognized by relevant authorities, which shall adopt appropriate measures in policies and practice to guarantee such women’s safety at this time."
supervise areas where dignity and privacy can be compromised, such as showers and toilets. Points where searches are required should be staffed to ensure that searches of women are only carried out by female officers and out of sight of male officers.

C. ADMISSION AND PLACEMENT

Women should be accommodated near their families to facilitate, through visits, the maintenance of family relationships as well as other relationships and contacts that could promote their successful return to the community on release. The premises on which admission procedures such as searches are conducted should be designed so as to protect women's safety, privacy and dignity. As part of the admission process, or ideally at an earlier stage, women with dependent children should be given the opportunity to make arrangements for the children to be cared for. Whether or not the prison is an appropriate place for them to remain in will depend on a number of factors, including the nature of the facilities available for their accommodation, which should resemble as closely as possible those for a child outside the prison. Women who are ostracized by their families and communities and/or for whom the family and community represent a serious risk may be better placed in a prison near the place where they are most likely to be able to live safely after release.

D. HEALTH-CARE FACILITIES AND SERVICES

The specific needs of women in relation to health and medical services should be reflected in the design of health facilities, with proportionately more space provided than for facilities in men's prisons. Most women will feel vulnerable when exposing their bodies, including because of cultural taboos or experience of domestic violence, sexual abuse or victimization. In addition, children are recognized as a particularly vulnerable group whose integrity should be protected. Accordingly, the way health-care services are provided, including the design of facilities, should be culturally appropriate and give particular priority to ensuring conditions which ensure safety and privacy for, and respect the dignity of, the women and children whose needs they serve.

Health facilities should provide private interview and examination room(s), a treatment area, storage space where records can be kept confidentially and a sufficiently large waiting area for women to sit under shelter. Toilets should be included in the health facility. The facility should be easily accessible from accommodation areas and the design should enable effective and unobtrusive security to be maintained. Women should not be required to pass male detainees when going to and from health facilities.

Consideration should be given to housing pregnant women in separate accommodation, particularly in cases where there are complications with the pregnancy. Separate accommodation may also be useful in the later weeks of the pregnancy, when the women may need to use toilet and shower facilities more frequently and may require more space to walk around. Separate accommodation should not result in pregnant women being isolated. Routines and procedures should allow pregnant women to mix with mainstream detainees and to access all services and amenities available to those women.

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61 BR 4 “Women prisoners shall be allocated, to the extent possible, to prisons close to their home or place of social rehabilitation, taking account of their caretaking responsibilities, as well as the individual woman’s preference and the availability of appropriate programmes and services.”

62 BR 49 “Decisions to allow children to stay with their mothers in prison shall be based on the best interests of the children. Children in prison with their mothers shall never be treated as prisoners.” BR 50 “Women prisoners whose children are in prison with them shall be provided with the maximum possible opportunities to spend time with their children.” BR 51 (2) “The environment provided for such children’s upbringing shall be as close as possible to that of a child outside prison.”

63 SMR 23 (1) “In women’s institutions there shall be special accommodation for all necessary pre-natal and post-natal care and treatment.”
E. HYGIENE
Women should have ready and safe access to toilets 24 hours a day. Where toilet facilities are located outside the accommodation area, prison management is responsible for ensuring that staff are available 24 hours a day to enable safe access to those facilities without delay. Toilets should be built to provide the maximum level of privacy.

Safe daily access to shower/bathing facilities should be provided, particularly for women and girls who are pregnant, have recently given birth, are breastfeeding or are menstruating and for those with dependent babies and children. Shower facilities should take account of increased need and use and provide for privacy. Soap for personal hygiene and laundry and towels should be provided in sufficient quantities to enable detainees to maintain an acceptable level of hygiene.

Women should be provided with suitable sanitary products to deal with menstruation (including the disposal of materials) with dignity and privacy. Detainees should be provided with a sufficient supply of such products to meet individual needs.

F. ACCOMMODATION, FACILITIES AND SERVICES FOR MOTHERS AND THEIR BABIES AND YOUNG CHILDREN
Living space should be provided for women and their children that is completely separate from male prisoner accommodation and living space. It should provide as normal an environment as possible. It should include sleeping spaces and indoor and outdoor play areas that take into account the space needed by the children. The space should include a specific area for the preparation of baby food and fluids. (It may be necessary to install a small kitchen area for that purpose.)

It is important that women with children be afforded some relief from the direct responsibility of having to care for their children 24 hours a day. Direct continuous care of a child is unusual in many cultures, particularly where an extended family situation is predominant. In any culture, both the child and mother can benefit from short periods of separation and this should be reflected in prison routines and procedures. Therefore, mothers with babies and children should have access to other women detainees. Operational routines should include conditions and arrangements for visits by other women detainees to the mothers and babies unit and permit safe movement between the mother and child unit and all mainstream services to which the mother and children require access.

Mothers with children should be given the opportunity to participate in work and other programmes which, on release, will contribute to their effective reintegration into the community. To facilitate this, arrangements may need to be made for children to be cared for by community volunteers, visiting relatives, staff or screened and qualified detainees.65

G. NUTRITION
The supply of water and food and cooking arrangements should take account of the fact that pregnant and lactating women need additional food and liquids and that babies and children need an appropriate diet. Appropriate food storage (e.g. cupboards, containers) should be provided, with access controlled by the mother. Babies and children must be counted as additional persons in the prison and the prison must provide for their nutritional needs and supply suitable feeding and drinking containers.66

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65 SMR 23 (2) “Where nursing infants are allowed to remain in the institution with their mothers, provision shall be made for a nursery staffed by qualified persons, where the infants shall be placed when they are not in the care of their mothers.”
66 BR 48 (1) “Pregnant or breastfeeding women prisoners shall receive advice on their health and diet under a programme to be drawn up and monitored by a qualified health practitioner. Adequate and timely food, a healthy environment and regular exercise opportunities shall be provided free of charge for pregnant women, babies, children and breastfeeding mothers.” BR 48 (3) “The medical and nutritional needs of women prisoners who have recently given birth, but whose babies are not with them in prison, shall be included in treatment programmes.”
H. WORK, EDUCATION, RECREATION AND OTHER PROGRAMME SERVICES
Irrespective of where they are held, women detainees should have at least the same access to education, recreation and other programme services as men.67 They should be provided with an external recreation area and rooms suitable for education, work and other programmes. The rooms may be multi-purpose but they must be separate from areas which are accessed by male detainees.

I. VISITING FACILITIES
Contact visits should be the norm. The space allocated for visits should reflect this principle as well as the fact that a high proportion of women in prison are primary caregivers of dependent children. The design of visiting sections should include play areas and other areas where mothers can have meaningful contact with their children and other family members.68 These areas need to be large enough to allow a number of children to move around at the same time. Having regard to prevailing weather conditions, both indoor and outdoor visiting areas should ideally be provided. Food and drink should be allowed to be consumed in contact visit areas.

Search facilities should be designed so as to protect the safety, privacy and dignity of women and their visitors, including visiting children.

Where non-contact visiting is the only option, the facility should permit small children to see their mothers from a seated position and to communicate verbally with them.

67 BR 42 (1) “Women prisoners shall have access to a balanced and comprehensive programme of activities which take account of gender-appropriate needs.” Other parts of this Rule concern programmes that seek to meet the needs of pregnant women, nursing mothers, women with children and women who have psychosocial support needs.
7. JUVENILES
This chapter deals with issues concerning juvenile offenders in prison. Children have special characteristics and needs, both as a group and as individuals. Within that group, children have particular needs at different stages of their development and girls have specific needs. The recommendations in this chapter apply to imprisoned girls as well as boys (see also the recommendations in Chapter 6). The United Nations Convention on the Rights of the Child defines a child as a boy or girl under the age of 18. The general recommendations in this document and the handbook which it supplements also apply to children.

**Reality**

While international standards are reflected to some extent in the national legislation of many countries, the legislation and, even more so, current practice are often inadequate. Social welfare, judicial and prison systems lack knowledge, the capacity and the resources to deal with children, particularly when overwhelmed by large numbers of adult males. There are substantial differences in national understanding and definitions of childhood in terms of legal majority and criminal responsibility, which are sometimes different for girls and boys, and there is little knowledge of their emotional and physical development needs. This is exacerbated, in some cases, by the lack of birth registration documents and of alternative means of determining age. In many countries, therefore, children can be found who are serving both short and long prison sentences, in prison buildings and systems that provide no or inadequate space for physical exercise, education, vocational training or family visits. Children are even found among the adult prison population, at risk of physical abuse, subject to influences that are unlikely to develop their positive potential as members of society and without access to the services that could do so.

**Good practice and operational implications**

Prison is not a place where children can successfully grow up physically, psychologically, intellectually and emotionally. In fact, detention presents many risks for those who are less mature and often physically weaker. This is recognized in international standards and norms, which require that arrest, detention or imprisonment of children be used only for the shortest appropriate period of time and as a measure of last resort, and that children be kept separately from adults.69 International guidance also requires that conditions of detention for detained children be such as to support the objective of providing care, protection, education and vocational skills, promoting and sustaining health and self-respect, and encouraging attitudes and skills that can assist in developing the children's potential as members of society.70 The standards also draw attention to the fact that girls have particular needs.

**A. ACCOMMODATION**

Juveniles will ideally be accommodated on a site that is completely separate from where adults are housed and spend their time. In giving preference to a building and site which ensures that juveniles are completely separate from adults, prison authorities endeavour to meet the need of children for protection and to increase the likelihood that space and buildings will be used in a way that prioritizes and meets their special needs. Many States recognize in their prison law and/or regulations that when designing detention premises in which children will be housed, a larger per capita amount of space than that envisaged for individual adults is required.

69 See, for example, the International Covenant on Civil and Political Rights (Articles 6, para. 5, 10, para. 2 (b), and 10, para. 3), United Nations Convention on the Rights of the Child (CRC), Standard Minimum Rules for the Treatment of Prisoners (particularly Rules 5 (1), 8 (d), 21 (2), 71 (5) and 77 (1)), United Nations Rules for the Protection of Juveniles Deprived of their Liberty, Fourth Geneva Convention (Article 50) and Additional Protocol I (Article 77), African Charter on the Rights and Welfare of the Child (Article 17, para. 1), Robben Island Guidelines (No. 36).

Where it is not possible to provide a building on a separate site, children's accommoda-
tion should be completely separate from that occupied by adults. For construction
features and supporting practices that should provide protection from the possibility
of contact between children and adults or breaches of children's privacy by adults, see
Chapter 6. Girls must be accommodated separately from boys (for further comments
on the needs of girls, see also Chapter 6, Women, girls and dependent children).

Sleeping accommodation should normally consist of small group dormitories or indi-
vidual bedrooms and permit such supervision as will ensure children's protection,71
including from other children.72

B. SAFETY
(See Chapter 6.)

C. ADMISSION AND PLACEMENT
The location of places of detention where children are accommodated should also be
such as to facilitate access to education, vocational training and other services of par-
ticular importance in meeting the needs of both boys and girls. (See also Chapter 6.)

D. HEALTH-CARE FACILITIES AND SERVICES
The screening, preventive and health-care provisions in a prison should be adequate
to meet the particular needs of boys and girls and to ensure safety, privacy and respect
for their dignity. Facilities should be available for drug and alcohol abuse prevention
and rehabilitation programmes that are specifically adapted to age, sex and other
requirements.73

E. HYGIENE
If children are able to engage in frequent physical exercise, this will increase their need
for access to facilities for washing themselves and their clothes. It should also be noted
that international guidance provides for children to be allowed to wear their own,
rather than institutional, clothing,74 which may necessitate greater access to laundry
facilities. (See also Chapter 6.)

F. NUTRITION
The supply of water and food should take account of the particular needs of the
children held in the establishment, with regard to their activity and different stages of
physical development.75

G. GENERAL AND VOCATIONAL EDUCATION AND RECREATION
The design and structure of the facilities should be appropriate to the need of children
for privacy, sensory stimuli, opportunities for association with peers and partici-
pation in sports, physical exercise and leisure-time activities.76 Children have a right
to education at least up to compulsory school-leaving age and although it is recom-
manded that this education be provided outside the prison facility,77 if this is not the
case in practice, suitable buildings, including a library, need to be available on the
prison site.

71 United Nations Rules for the Protection of Juveniles Deprived of their Liberty, Article 32.
72 A prison that houses children up to the age of 18 will contain individuals at vastly differing stages of emotional,
psychological and physical development, without the guidance and protection that would normally (ideally) be
available from adult family members.
73 Ibid., Article 54.
74 Ibid., Article 36.
75 Ibid., Article 37.
76 Ibid., Articles 32, 47.
77 Ibid., Article 38.
H. VISITING FACILITIES

Adequate communication with the outside world\(^{78}\) is seen as an integral part of the right to fair and humane treatment and as essential to the preparation of juveniles for their return to society.\(^{79}\) Children in detention, and in particular those in pre-trial detention, have at least the same need as adults for access to confidential space where they may meet legal and other advisers and representatives. Children have the right to receive regular and frequent visits from the family, the recommendation being that visits take place “in principle once a week and not less than once a month, in circumstances that respect the need of the juvenile for privacy, contact and unrestricted communication.”\(^{80}\) This needs to be reflected in the number and type of meeting rooms and spaces provided.

\(^{78}\) Ibid., Article 59: “Juveniles should be allowed to communicate with their families, friends and other persons or representatives of reputable outside organizations.”

\(^{79}\) Ibid., Articles 59, 60, 61.

\(^{80}\) Ibid., Article 60.
8. PRISON MAINTENANCE
INCLUDING THE INVOLVEMENT OF DETAINEES IN MAINTAINING PLANT AND EQUIPMENT
This chapter deals with general issues concerning prison maintenance and the involvement of detainees in such activities. It makes reference to the relevant international standards and considers their operational implications.

The ICRC handbook makes no direct mention of using detainees to maintain or operate plant and equipment. However, in many developing countries it is common for detainees to assume responsibility for these functions. The ICRC seeks pragmatic solutions to humanitarian issues and, if acceptable and with the agreement of those concerned, often chooses to train detainees to carry out maintenance activities.

**Reality**

Many prisons, particularly those with chronic overcrowding, have neither the personnel to maintain infrastructure and equipment nor the custodial staff to organize such work. There is often no budget allocation for maintenance, including maintenance of essential services. In such circumstances, detainees may assume responsibility for operating and maintaining water and sanitation and other services. Providing detainees with maintenance training is to recognize that detainees have a vested interest in maintaining plant and equipment in good working order.

However, there is an inherent risk that detainees and/or staff may introduce a payment system, charging other detainees for access to services. In such circumstances, detainees and/or staff may seek to justify the payments as being necessary to cover the cost of equipment and materials not provided by prison management. This must be properly managed by staff to ensure compliance with the United Nations Standard Minimum Rules for the Treatment of Prisoners, which prohibit detainees from supervising, controlling and charging for services. Such a situation can result in discrimination and possible ongoing abuse against detainees who are unable to pay the fees.

**Good practice and operational implications**

**A. KEY PRINCIPLES**

Management is responsible for maintaining the prison in good working order. This responsibility includes providing materials, equipment and tools, carrying out maintenance work, ensuring the quality of the work, and employing or contracting skilled traders to manage, organize and supervise the maintenance work. Detainees who have appropriate skills may be employed.

Essential plant and equipment should be provided by the government and an adequate maintenance programme developed and implemented.

A maintenance programme should include preventive, corrective and crisis responses. Preventive maintenance includes regular cleaning and inspection of infrastructure and services. It should also include training detainees to fulfil maintenance responsibilities under the supervision of prison staff.

As part of their education/training, detainees should be given an opportunity to develop new and existing skills and a sense of responsibility. In some prison systems detainees are trained in construction trades and methods and then employed in supervised construction teams to build prison facilities.

It should be noted that, although they are part of maintenance, domestic cleaning tasks are generally considered compulsory activities for all detainees.

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81 SMR 71 (2) “All prisoners under sentence shall be required to work, subject to their physical and mental fitness as determined by the medical officer.” SMR 71 (3) “Sufficient work of a useful nature shall be provided to keep prisoners actively employed for a normal working day.” SMR 71 (4) “So far as possible the work provided shall be such as will maintain or increase the prisoners’ ability to earn an honest living after release.” SMR 71 (5) “Vocational training in useful trades shall be provided for prisoners able to profit thereby and especially for young prisoners.” SMR 71 (6) “Within the limits compatible with proper vocational selection and with the requirements of institutional administration and discipline, the prisoners shall be able to choose the type of work they wish to perform.”
B. DEVELOPING A MAINTENANCE PLAN

Maintenance requirements are influenced by the quality of the infrastructure and the technical expertise used in the original construction, the quality of replacement parts, the availability of technical maintenance skills, the timeliness of the response, the climate and the quality of staff supervision.

The principal maintenance tasks include:

- daily cleaning (accommodation areas, kitchens and food preparation areas, toilets, offices, courtyards and drains);
- daily inspection to identify broken infrastructure and equipment;
- regular inspection and management of septic tanks;
- regular inspection of roofs and guttering;
- inspection of electrical circuitry;
- cleaning and disinfecting of the water storage infrastructure;
- painting – anti-rust paint on metallic services;
- advice to new detainees on maintenance arrangements;
- urgent repairs to water, sanitation, electrical, plumbing and other services, as required.

Maintenance materials and replacement parts should be available locally, as should the technical expertise needed to carry out the maintenance. Where donors propose providing equipment and plant (including vehicles), the availability of local, durable replacement parts should be determined and the donor advised before an initial commitment is made.

Maintenance plans should:

- be based on a preventive maintenance approach and include routine replacement as a result of wear and tear as well as the capacity to provide immediate responses to crisis situations; a review of the use of equipment should be carried out at regular intervals to ensure that unnecessary wear and tear is minimized;
- be costed as a separate line item in an operating budget. A recording/accounting method should be implemented which reflects monthly maintenance expenses. An annual budget item for routine and irregular costs should be established and forward budget estimates should be presented annually;
- include operational procedures for each task.

If an adequate maintenance budget is not established, unnecessary damage may be incurred by plant and equipment or funds may need to be transferred from other budget items (e.g. food, medical services) to provide money for essential maintenance work.

Essential daily maintenance includes:

- cleaning of all premises;
- refuse management;
- yard and drainage cleaning;
- identification and repair of damaged plant and equipment, particularly doors, windows, toilets and drains.

Essential regular maintenance includes:

- cleaning roofs and drainpipes;
- checking septic tanks and soak pits;
- changing generator filters and oil;
- checking and cleaning electrical control panels;
- cleaning and disinfecting water storage;
- masonry repairs;
- painting metal parts with anti-rust paint.
Installing any system, such as an electronic prisoner register, which relies on a continuous supply of electricity can present major challenges where such a supply is not assured. Electricity supplied by a community grid is usually available for a limited number of hours each day. Where this is the case, a backup system is required and this is most commonly provided by generators. Whether generators are used regularly or infrequently, they need to be covered by a maintenance and inspection programme to ensure their reliability. Experience has shown that it can be difficult to service them and to obtain replacement parts because of lack of funds, the unavailability of parts or the lack of local technical expertise.

Prisons in resource-poor environments have successfully installed solar panels to augment their energy supply. Apart from regular cleaning, they have minimal maintenance requirements and replacement parts are generally available within the country.

Biogas should also be considered as a means of contributing to energy requirements. This technology requires expert supervision and knowledge which is available if it has been adopted by the local community. (See also Chapter 5, Good practice and operational implications, (e) Management of waste water.)

Fire-fighting equipment should be installed by arrangement with the local fire authority. Regular inspections should be carried out as part of the overall maintenance plan and fire drills conducted regularly (including the emergency evacuation of all staff and detainees).

Cooking facilities should be designed on the basis of the type of fuel to be used. For example, an enclosed space suitable for electricity or gas becomes a hazardous area when wet wood or other combustible material is used as fuel.

C. MAINTENANCE CONSIDERATIONS WHEN DESIGNING NEW PRISONS AND EXTENDING EXISTING PRISONS

It is essential that an annual prison maintenance plan be developed which includes all buildings and equipment and ensures regular and routine maintenance inspections (see Section (b) above, Developing a maintenance plan). It is often assumed that maintenance will be minimal in the first and early years of new and rehabilitated buildings. However, experience has shown that deterioration begins during the construction phase. A budget for annual maintenance is therefore necessary from the prison’s first year of operation although fittings may still be under warranty.

D. ORGANIZING AND SUPERVISING THE WORK

Since responsibility for maintenance lies with the government, staff must assume supervisory responsibility. Detainees carrying out the work may be as skilled as, or even more skilled than, staff but this does not diminish staff responsibility.

An effective maintenance system requires a staff member to be in charge and to have direct access to the prison manager responsible for funds. The maintenance officer should be involved in selecting detainees to be allocated to maintenance work. The responsibilities of the officer in charge include preparing the maintenance plan, preparing and managing a budget, organizing and supervising the plan’s implementation, controlling the use of materials and equipment, and training detainees.

The maintenance team needs supervision, records, operational procedures and technical support to carry out the maintenance as well as the necessary tools, equipment and materials. Supervision by staff should include accounting for tools and equipment as well as the quality and effectiveness of work carried out.

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82 SMR 72 (1) “The organization and methods of work in the institutions shall resemble as closely as possible those of similar work outside institutions, so as to prepare prisoners for the conditions of normal occupational life.”
Under no circumstances should detainees be required to pay other detainees for services which meet their basic needs. Detainees cannot own government property and cannot therefore charge other detainees for the use of, or access to, equipment and/or services.

E. REGULATION OF WORK

Conditions of work must be subject to the same laws as those applicable outside the prison. The work must be carried out in a way which is safe and in accordance with occupational health and safety requirements. Detainees must be provided with the necessary equipment and materials, be properly instructed and receive sufficient training (e.g. regarding the risk of electrocution) prior to beginning work.

F. SELECTION OF DETAINEES FOR EMPLOYMENT

The selection process should be transparent. Detainees selected should be fit and have the necessary skills (or the potential if training is proposed). The work should be within their physical capabilities and must not subject them to hardship. If, after approved training, they cannot carry out the work to the required standard, they cannot be allowed to take on the proposed role. A formal system of security risk and needs assessment should be in place and risk accounted for in the initial selection and ongoing review processes.

G. REMUNERATION

Detainees should be remunerated for their work, although remuneration need not be financial. Rewards may be provided through the remission system, improved or enhanced accommodation, extra food or extra visits.

There may be different rates of remuneration and compensation for detainees but the key issue is that payments for each position should be regulated and include a scale.

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84 SMR 71 (1) “Prison labour must not be of an afflictive nature.”
85 SMR 76 (1) “There shall be a system of equitable remuneration of the work of prisoners.”
9. PLANNING PRISON CONSTRUCTION OR REHABILITATION
This chapter deals with key issues which should be considered and addressed when the construction or rehabilitation of a prison or part of a prison is being planned. It is not the ICRC’s role to advocate the building of prisons but the fact remains that it can be appropriate to replace ageing infrastructure which is no longer fit for purpose or, in particular circumstances, to construct additional prison accommodation. The ICRC has observed that poor planning processes contribute to the major flaws that result in a deterioration in the conditions of imprisonment and the treatment of prisoners. This chapter provides guidance on key aspects of the planning process.

Reality
To design and build a properly functioning prison, the design team and building contractor must be given clear and comprehensive plans, which include details of how the prison is to operate, its functions and activities, and detainees’ movements within as well as to and from different areas (see also Chapter 2). Clearly defined norms and standards are also required if a system is to be built that meets the requirements within the available budget. These norms and standards are often lacking or unrealistic.

It is not uncommon for design proposals to reflect only the construction component and for little regard to be paid to the other components essential to providing a safe, secure and humane environment. The design may fail to include cooking facilities, visiting facilities, workshops, programme and education facilities, interview rooms, medical and health services, staff offices and administration facilities. Other design faults include failing to identify an adequate source of water or electricity, inadequate ventilation systems and sanitation systems which are insufficient for the planned number of detainees. These errors are not easily or cheaply rectified at a later stage. The most costly design faults are often those which require high staff to detainee ratios in order to maintain adequate safety and security.

National authorities often have insufficient capacity to conduct the coherent, comprehensive planning processes necessary for the development of new facilities or extensions; therefore ICRC delegates are regularly asked to comment on draft plans. Over-simplified designs and/or ad hoc planning processes result in an inappropriate design and buildings which are not fit for purpose. The planning process also often fails to take into consideration the budget and numbers of staff needed to operate the prison in accordance with its design. Responsibility for design and construction is often spread across more than one department. In this case operational guidance should be sought from the national prison authority.

To reduce overcrowding, there is often pressure to open the prison before the commissioning process has been completed, resulting in unsafe work practices which compromise safety and security.

Good practice and operational implications
Planning, designing and constructing a prison is a lengthy process. Expensive mistakes result when shortcuts are taken. Mistakes include designing premises that are not in keeping with the intended prison management regime, selecting an inappropriate location for the prison and using unsuitable construction materials. As a minimum, the following issues should be addressed when planning new prisons or additions to existing facilities in all countries, including developing countries.

A. MASTER PLAN
A master plan should be drawn up to guide the overall development of the prison system. It should describe all prison facilities, including their capacity, security level and the state of existing infrastructure as well as the purpose of the prison system, its core values and any gaps in the system. It facilitates the assessment of outstanding infrastructure needs.
The process for developing a master plan includes the following steps:

→ determining the core values on which the prison department bases its decisions about the system’s management and development;
→ determining goals for the prison system and each prison;
→ conducting needs assessment(s) to determine the capacity and capability of existing institutions and analysing prison population and trends;
→ making a plan of the entire prison system to ensure that its structure provides a variety of prison functions and capacities which cater for different groups or classifications of detainees.

The initial master planning process will depend on a range of factors, including the number of prisons in the system as well as the knowledge of key personnel involved in the planning process. The master plan should be updated each year.

**B. MANAGEMENT STRATEGY**

The master plan is the basis for developing the management strategy which underpins the design of a new or extended prison. The management strategy should be developed by a multidisciplinary team which is led by prison management practitioners and includes policy experts, psychologists, social workers, health professionals, prison programme and industries experts, prison security experts and architects/engineers with expertise in prison design and management.

The management strategy describes how the prison is to be managed. It should include:

→ the purpose of the prison and the underlying prison philosophy;
→ the services and facilities to be provided and the functional relationships between them;
→ the key operational policies, including the regime and hours of operation, the supervisory approach and security;
→ the number and type of detainees;
→ the proposed range of programmes and activities;
→ the services and facilities within each accommodation block and cell;\(^{86}\)
→ the total size of the prison within the external perimeter and the dimensions of the dormitories, rooms and cells in the accommodation area;
→ the project budget and planned construction schedule;
→ the management structure, the staff organizational structure and staff numbers (custodial, administration, programmes, industries, health, maintenance, etc.).

Cost is a consideration for all authorities when determining the management regime of a prison. The manner in which buildings are used can increase or reduce the cost of prison operations. If detainees’ hours outside accommodation cells and blocks are increased, the overall cost of operating the prison can be reduced because there is no need for the high numbers of staff required when services are taken to the detainees and close supervision is maintained. In more open regimes, staff costs may be further reduced if detainees undertake all domestic activities (cooking, laundry, gardening, access to water and sanitation facilities, etc.) without restriction. Attitudes towards the management of detainees of different security levels differ between jurisdictions/countries.

The importance of describing the operation of the prison is that the design needs to support its operation. Information is provided about the range and type of buildings, their purpose, the functional relationship of buildings to each other and the movement of detainees, staff and others who have legitimate business in prisons (e.g. visitors, workmen). The management strategy should be approved by the prison department head and preferably also by the relevant government minister.

\(^{86}\) SMR 63 (3) “It is desirable that the number of prisoners in closed institutions should not be so large that the individualization of treatment is hindered. In some countries it is considered that the population of such institutions should not exceed five hundred. In open institutions the population should be as small as possible.”
C. DESIGN TEAM – COMPOSITION AND FUNCTION

Composition
The team responsible for developing the prison design should include prison managers, architects, engineers, security experts, psychologists, teachers, prison industries officers, and medical and health professionals. It may be appropriate to include traditional leaders who can advise on the cultural requirements of detainees. It is preferable for members of the team to have experience in the design, construction and maintenance of prisons or to be able to draw on the experience and knowledge of others.

The design team and decision-makers should have a good knowledge of the relevant international instruments. Where different departments have responsibility for different aspects of the prison, each department should be represented on the design team. If this is not feasible, the design team should establish a formal arrangement whereby the departments can contribute effectively to the design process. For example, a health services reference group may be established.

Role and organization of work
The design team is responsible for ensuring that preliminary or schematic designs reflect the functional relationships of the buildings as described in the management strategy and that these support the implementation of the intended operation of the prison. Where it is proposed to add accommodation to an existing facility, it should be the responsibility of the design team to determine the adequacy of existing services and the need for additional facilities to meet the increased demand.

The design team’s responsibilities should include:
  → the development of written guidelines for the operational programme;
  → space allocations for all functions;
  → concept plans;
  → design criteria and design guidance;
  → the approval of the final design, including the budget.

It is important for members to visit prisons to gain first-hand information about practical issues which need to be taken into account during the design phase. Existing prisons may have limitations and managers may not have a comprehensive view of alternative arrangements. However, the practical experience of prison managers combined with other sources of information about prison design and construction can improve the quality of the design team efforts.

Before developing the preliminary design, space allocation tables must be established, i.e. the space allocated per detainee for accommodation, service areas, dedicated security areas, administration and other specified internal and external spaces that will need to be constructed. The preliminary design should include:
  → floor plans for all buildings;
  → elevation drawings of the exterior building facades and all sides;
  → details concerning the use of the site;
  → the design conditions of the housing units; and
  → all service and activity areas. Service areas should include admission and release, gate entry, mental and medical health, food preparation, accommodation, industries, recreation, sports, education, visits, legal visits and administration.

This phase also includes determining which building security systems and technologies are to be adopted.
The design should recognize the different requirements for convicted and pre-trial detainees. For example, the visiting space for pre-trial detainees should reflect their requirement for more frequent visits from legal advisors while convicted persons need vocational training, work and education facilities to prepare them for effective reintegration into the community following the conclusion of their sentences.

The design team should meet regularly. Weekly meetings ensure that decisions are made in a timely manner and can be revisited with limited impact on work progress.

Compromises during the design process will be necessary. In handling these compromises, the project manager and steering committee must ensure that the design features support the approved management strategy in a cost-effective manner and meet the minimum provisions of international instruments and national standards. In particular, the recommended minimum space per person has a considerable impact on the design, construction and management costs of a prison. Jurisdictions which implement minimum measurements generally have guidelines for the design of prison accommodation.

After the preliminary design has been approved, the design development details are completed and followed by the preparation of construction documentation and final specifications. This phase includes developing final plans and specifications, the construction schedule and the final project budget. The budget estimation process should include design and construction, the annual operating budget and the start-up budget.

The design team is responsible for developing a quality control system which includes the standards to be applied during the construction process. The overall project and final plans should be approved by the department head and preferably also by the relevant government minister.

Whether construction of the prison is contracted to the private sector or undertaken by government employees, it is essential that responsibility for management of the project be retained by the competent department through a project manager or other designated officer. The design team is responsible for overseeing the budget and schedule management and should expect weekly and monthly reports from the project manager throughout the design and construction phases.

All processes, including the tendering process, should be transparent and consistent with relevant government policies. Where necessary, the design team should develop relevant procedures.

D. PRISON LOCATION

The purpose of a prison should be a primary guiding factor in selecting its location. The site should be in close proximity to a realistic water supply and to the local electricity grid. It should be located near to an urban centre which can provide a suitable pool of staff and services, including schools for staff members’ families. The location should also be close to medical and emergency services. It should be well serviced (or able to be well serviced) by affordable public transport so as to enable detainees’ families to visit regularly and staff to have access to affordable transport to work. A prison intended to accommodate pre-trial detainees should be located close to courts where the cases of the majority of detainees will be heard. The land should be sufficient to provide food support and income-generating activities as well as staff accommodation where it is government policy to provide the latter. Areas prone to flooding and other environmental hazards should be avoided.
Remote locations which may offer less expensive initial land costs may prove to be less economical in the longer term. The cost of transporting goods and services may be significantly greater. It may be necessary to subsidize the cost of staff accommodation or to provide incentives for staff to live in more remote areas. Rural and remote areas may be unable to provide the full range of professional services (education, health, medical, emergency) needed in a prison. It can be especially difficult to attract specialists, such as medical staff, psychologists or teachers to remote locations. Staff members who relocate to remote areas often experience high stress levels and absenteeism can be frequent, especially when they are separated from their families.

The relevant local authorities, including water and electricity utilities and local and provincial governments, should be consulted. Local authority support is necessary to ensure access to public services, including road maintenance, refuse removal, access to the electricity grid and the water supply network. Legal ownership and any local restrictions applying to the land should be determined before the start of the design phase.

At the earliest stage, a community consultation process should be implemented to ensure that issues of concern to the community can be addressed and all relevant local information concerning the construction and management of the prison obtained.

E. GUIDING CONSTRUCTION

Supervision of the prison construction requires daily on-site inspection by the project manager with assistance from prison operation specialists. It should be based on project plans and the testing programme. This inspection is in addition to the routine construction supervision and management which should be provided by government or outsourced to relevant experts in architecture, construction, security, mechanics, electricity supply, plumbing, structural engineering and, importantly, in prison operations.

Experience suggests that prison operations experts can help to avoid costly construction changes by identifying, at an early stage, design flaws which have been inadvertently included and which can be rectified with minimal cost at that stage. Regular review meetings of the design team should be held throughout the construction period to ensure that matters can be dealt with expeditiously and as early as possible before major expenses are incurred. The design team should assess the suitability of all fittings, furnishings, equipment and systems as well as the internal finish of all areas of the prison.
F. COMMISSIONING

The commissioning process is the final step in ensuring that all aspects of the prison function as intended and are fit for purpose. Commissioning of the prison is scheduled and coordinated with the “operational transition/activation and training” period that also occurs during the construction phase. It takes place towards the end of construction, before the prison opens and before it receives detainees. The purpose of the commissioning process is to test building components and systems to make sure that they function, are suitable and meet the design intent and specified standards. Testing involves replicating the way the prison is to operate. For example, all toilets should be flushed and all taps turned on for 30 minutes around the time when prisoners’ showering and toileting is scheduled to occur to ensure that the infrastructure can meet the peak demand.

The process for commissioning a prison begins at the start of construction and continues throughout the building programme. It is not a haphazard process. It requires the project management team to develop a comprehensive project plan which includes policies and procedures for all aspects of the detainee management plan and operation of the facility, such as regular routines, the use of plant and equipment, vehicle and pedestrian access and egress, management of water and sanitation services, and contingency plans for fire, riots, natural disasters, escapes, suicides, etc. The commissioning process must be supported by a staff recruitment and training plan which will have sufficient staff in place during the latter stages of commissioning.

The commissioning agent or consultant should be responsible for ensuring that the prison service receives and understands all maintenance manuals and warranty information included with the procurement and handover of the facility from the contractor. A technical file should be provided by the construction company/project manager and should give full details of underground and above-ground installations and services, material notices and maintenance guidance. Relevant personnel responsible for ongoing maintenance of the prison infrastructure should be given training by the construction company prior to handover of the premises.

In overcrowded prison systems, authorities may seek to shortcut the commissioning process and begin transferring detainees to the facility. This should be resisted. The commissioning process is the period during which all services are tested and operational routines rehearsed and revised to ensure that safety, good order and security can be maintained. Consequently, any truncation or short-cutting of the process will jeopardize both safety and security.
MISSION
The International Committee of the Red Cross (ICRC) is an impartial, neutral and independent organization whose exclusively humanitarian mission is to protect the lives and dignity of victims of armed conflict and other situations of violence and to provide them with assistance. The ICRC also endeavours to prevent suffering by promoting and strengthening humanitarian law and universal humanitarian principles. Established in 1863, the ICRC is at the origin of the Geneva Conventions and the International Red Cross and Red Crescent Movement. It directs and coordinates the international activities conducted by the Movement in armed conflicts and other situations of violence.