GNAP 03:

OSCE Safety and Security Infrastructure Upgrades for SALW and SCA

Contents

Foreword

The OSCE Document on Small Arms and Light Weapons (SALW) was adopted on 24 November 2000 and reissued on 20 June 2012 (FSC.DOC/1/00/Rev.1). The OSCE Document on Stockpiles of Conventional Ammunition (SCA) was adopted on 19 November 2003 and reissued on 23 March 2011 (FSC.DOC/1/03/Rev.1).

The two documents set out the OSCE's norms, principles and measures to address the threat posed to the international community by the excessive and destabilising accumulation and uncontrolled spread of SALW and SCA. They describe *inter alia* the assistance mechanism and outline procedures for requesting and providing assistance to meet the requirements of the documents.

Guidance Notes for Assistance Projects (GNAP) provide direction and practical advice on how assistance should be requested, and how assistance projects should be initiated, designed and implemented. They provide examples by drawing on lessons learned from managing the life-cycle of OSCE SALW and SCA projects. Although GNAP are aimed primarily at OSCE staff, it is envisaged they will benefit other stakeholders involved in requesting and implementing assistance projects.

The OSCE Conflict Prevention Centre (CPC) Support Section is the custodian of GNAP and will make the latest versions widely available.

Introduction

GNAP 02 provides direction and advice to stakeholders involved in OSCE assistance projects in SALW and SCA. It covers all stages of the assistance mechanism, from clarifying the need for assistance through to project completion. Guidance is provided in terms of principles which apply to all OSCE assistance projects, and step-by-step advice on how the principles should be used by national authorities, organizations and individuals responsible for designing, developing and implementing assistance projects.

The purpose of this Guidance Note is to assist project planners and implementers involved in OSCE assistance projects which include safety and security infrastructure upgrades for SALW and SCA.

Projects involving the design and construction of buildings, infrastructure areas and other facilities must take into consideration a range of legal/statutory and technical requirements. Such projects include the elements of design and construction oversight and quality assurance. The projects can be complex to manage, may involve significant risk and many fail because of ill-informed choices made in the early stages of a project. A poorly designed approach or wrong procurement decision can lead to delays, higher costs and less value for money. Project risk management should be a core element of OSCE infrastructure project selection, planning and design, and should be continuous across the entire life cycle of the project.

This Guidance Note addresses the key stages of an infrastructure project and maps the stages onto the normal activities for planning and implementing an OSCE assistance project described in GNAP 02. Project planners and implementers should refer to both documents.

OSCE safety and security infrastructure upgrades for SALW and SCA

1. Scope

This Guidance Note provides direction and advice to stakeholders involved in OSCE SALW and SCA assistance projects which include safety and security infrastructure upgrades. It covers all stages of the assistance mechanism, from clarifying the need for assistance through to project completion.

Guidance is provided in terms of principles which apply to all OSCE assistance projects involving safety and security infrastructure upgrades, and step-by-step advice on how the principles should be pursued with respect to national authorities, organizations and individuals responsible for designing, developing and implementing such projects. This practical guidance is supported by examples and key messages.

2. References

References used in this Guidance Note are listed at Annex A. **Normative** references are those that are prescriptive and are to be followed in order to comply with the requirements of this Guidance Note. **Informative** references are those that are descriptive and aim to help the reader understand the concepts presented in this Guidance Note.

3. Terms, definitions and abbreviations

The words 'shall', 'should' and 'may' are used to indicate the intended degree of compliance. This use is consistent with the language used in ISO standards and guidelines[1]:

a) 'shall' is used to indicate requirements, methods or specifications that are to be applied in order to conform to this Guidance Note;

b) 'should' is used to indicate the preferred requirements, methods and courses of action; and

c) 'may' is used to indicate a possible method or course of action.

OSCE missions, special missions, observer missions, centres, programme offices and presences are referred to collectively as 'OSCE field missions'.

An informative glossary of technical terms, definitions and abbreviations used in this GNAP is provided in the Annex B.

Furthermore, the terms, definitions and abbreviations related to the OSCE procurement processes and procedures are to be found in the OSCE's Financial and Administrative Instruction No. 6 and the Procurement and Contracting Manual.

4. OSCE policy and procurement rules on infrastructure projects

Financial and Administrative Instruction No. 6 (FAI 6) contains the general procurement and contracting policies and procedures which the OSCE participating States (pS) have approved. It is the responsibility of the Chief, Procurement and Contracting Unit (C/PCU) to provide common interpretations and clarifications on its application. For this purpose, C/PCU issues the Procurement

[1] International Organisation for Standardization (ISO) is a worldwide federation of national bodies from over 130 countries. Its work results in international agreements which are published as ISO standards and guides.

and Contracting Manual (PCM). The PCM not only explains the policies and procedures in detail, it also includes guidelines, examples and templates.

The Procurement and Contracting Manual is a living document. It is updated from time to time in order to include changes in procedures or to provide further clarifications and guidance. The PCM together with FAI 6 provides direction in procurement activities and applies to all Executive Structures.

No specific requirements, clarifications or guidance on infrastructure projects are given in the PCM and FAI 6, although three issues are of particular note: Best Value for Money (BVM), contracting lead times, and competitive tendering / monopolies.

Nevertheless, the "Project Management in the OSCE: A Manual for Programme and Project", a manual designed and developed by the OSCE Secretariat's Conflict Prevention Centres Programming and Evaluation Support Unit (CPC/PESU), contains general, but comprehensive guidance on how the OSCE applies the Project Cycle Management method and the Logical Framework Approach to its project work. This document is a complete reference guide to how projects are managed in the OSCE, including essential information on the regulatory and information technology aspects of project management. It is aimed at Programme Managers who will be providing overall managerial guidance to projects, Project Managers who will be implementing projects, and other OSCE staff/mission members who will be part of a project team, as well as consultants and external auditors who wish to gain an insight to the OSCE project management method.

4.1 Best Value for Money

The concept of BVM underlies all OSCE procurement and contracting activities. BVM does not mean lowest purchase price. The BVM principle takes all direct and indirect costs into consideration that influence the overall cost of goods/services. The calculation is known as 'total cost of ownership' or 'total life-cycle cost'.

The application of the BVM principle may demonstrate that long-term savings can be achieved by spending more on the initial purchase. Conversely, lower cost items may result in considerably higher cost over the years. This is particularly relevant for infrastructure projects where the 'total life-cycle costs' (construction plus maintenance and operating costs) may be five times the initial construction costs.

4.2 Average lead times

The Procurement and Contracting Manual states the average lead time for Invitation to Bids (ITBs) is 2-3 months for contracts of €50,000 - €250,000, and 4+ months for contracts above €250,000.

This has implications for the way in which infrastructure projects are planned, contracted and implemented, in particular for large projects which involve the installation of specialist facilities (such as fire suppression or CCTV security systems) into new buildings. As discussed in Section 6 of this GNAP, an infrastructure project involves a number of stages and work packages, and each subsequent work package is dependent on the successful completion of the previous stage or work package. Ideally, each work package should have its own ITB with Terms of Reference / Specification, however the long lead times for each phase could result in an extended project duration. Project planners should consider the benefits, but also the risks, of having a single ITB.

4.3 Competitive tendering and monopolies

As a general rule, contracts should be awarded on a competitive basis. Competitive offers are solicited in different ways depending on the complexity of the commodity (goods/services) and the estimated value of the contract. In the case of infrastructure projects, the provision of utilities (electricity, gas and water) and telecommunications (fixed line telephony) may be run by monopolies. The PCM notes that "…. monopolies exist both by law and by fact in many OSCE pS, and are particularly common in utilities and telecommunications sectors." In such circumstances, a single entity may have the right to install the infrastructure.

5. OSCE assistance procedure

The OSCE Documents on SALW and SCA prescribe an agreed 'standard' procedure for dealing with a request for assistance from a pS. Guiding principles and step-by-step advice on using the OSCE assistance procedure, including the responsibilities and obligations of key stakeholders, is given in GNAP 02.

6. ISO standards, other construction and SALW/SCA-related infrastructure guidelines

The ISO has developed over 1,100 standards and guidelines related to buildings and construction. Fifty-two OSCE pS are members of ISO and many have adopted the ISO international standards and guidelines on buildings and construction as national standards; the latter are integrated into the national building code. However, in those pS who are not members of the ISO, these standards are used as an orientation point for developing and/or maintaining local/national construction standards.

The other construction related guidelines such as the International Federation of Consulting Engineers[2] (FIDIC) Golden Principles, Red and Orange Books may be applied in different stages of the construction projects.

A summary of the ISO standards and other guidelines which are likely to be relevant to OSCE infrastructure projects is at Annex C. Project planners should make use of ISO standards and guidelines as they provide important examples of international best practice in the design and implementation of infrastructure projects.

The SALW/SCA-related standards and best practices under the auspices of the OSCE and the UN provide further guidance on type of infrastructure, their specific utility, technical requirements and designs in this subject matter. References are provided in the Annex C.

7. Key stages of an infrastructure project

7.1 Approach and principles

Traditionally, an infrastructure project has been considered as having four key stages as shown in Figure 1, with 'gate reviews' at the end of each stage. Gate reviews provide the project 'sponsor' with the opportunity to consider progress to date and plans for the next package of work, before deciding whether the overall project remains viable, practical and achievable. Large and complex infrastructure projects usually divide the delivery phase into a number of work packages with 'gate reviews' at the end of each package.

[2] FIDIC, the International Federation of Consulting Engineers, is the global representative body for national associations of consulting engineers and represents over one million engineering professionals and 40,000 firms in more than 100 countries worldwide

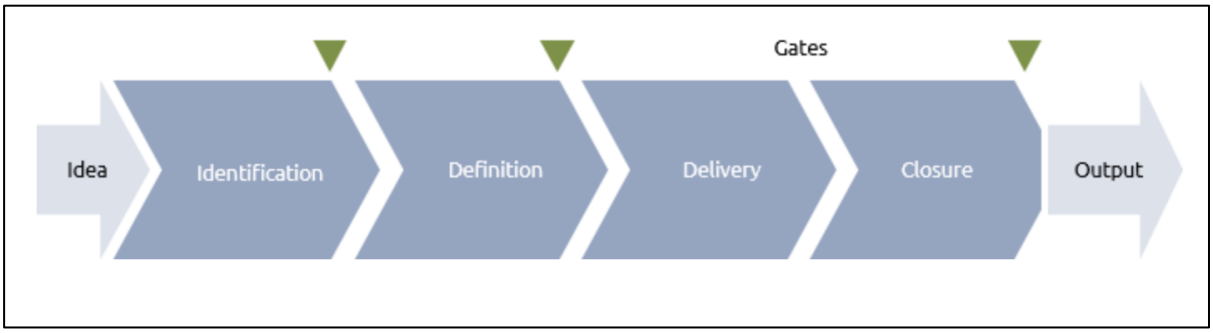

Figure 1: Infrastructure project stages

More recently, greater attention has been given to **life cycle** infrastructure issues with emphasis on the whole-life benefits and costs of a building including its construction, maintenance, operation and occupancy, and end of life issues. Such an approach not only addresses the anticipated whole-life costs but also considers issues such as the intended lifespan, utility and the environmental impact of a new building or facility.

Full details on the life cycle approach to infrastructure project planning can be found in ISO 15686 – Service life planning – buildings and constructed assets.

7.2 Simplified approach

For some infrastructure projects it may be appropriate to adopt an simplified approach, for example if a short term or temporary solution using modular, portable buildings such as containers will adequately meet the need user needs as well as the national building code and the OSCE relevant procurement rules and regulations. In such cases, it may not be required to use a full array of a construction engineering services.

7.3 Project risk management

Infrastructure projects can be complex to manage, and risk failing because of ill-informed choices made in the early stages of a project. A poorly designed approach or wrong procurement decision can lead to delays, higher costs and less value for money. Project risk management should be a core element of OSCE infrastructure project selection, planning and design, and as such, it should be reviewed, discussed and updated continuously across the entire life cycle of the project.

Key risk messages:

- **Forward-looking risk assessment**. What risks are the project facing? What is the potential cost of each risk? What are the potential consequences for the project's later stages as a result of decisions and choices made now?
- **Risk ownership**. What stakeholders are involved, and which risks should different stakeholders own? What risk-management issues does each stakeholder face, and what contribution to risk mitigation can each of them make?

- **Risk adjusted processes**. What are the root causes of potential consequences, and through which risk adjustments or new processes might they be mitigated by applying risk-management principles?
- **Risk governance**. How can individual accountability and responsibility for risk assessment and management be established and strengthened?
- **Risk culture**. What are the specific desired mindsets and behaviours of all stakeholders across the life cycle, and how can these be ensured?

Extract from 'A risk-management approach to a successful infrastructure project', Beckers and Stegemann, McKinsey & Company, November 2013

7.4 Stage 1: Identify the need and purpose

The first stage of an infrastructure project is to identify the need for the proposed location, new or upgraded buildings or facilities. What is the location, are there currently existing buildings and/or facilities, and if so why are they inadequate?

Has the pS already identified a site? Who is currently using and maintaining the location, and who will use and manage the new/upgraded infrastructure? Who are the actors that need to be involved in the discussion and approval of the design of the new functionalities, processes, and equipment operated at the location? How will the buildings be maintained, by whom, is there a legal act, and a budgetary line assigned towards that end, as well as a necessary maintenance contract?

What are the key issues that will dictate the design options: legal requirements, building regulations, service, functionalities and equipment necessary for upgraded functioning, standards that the location/infrastructure needs to meet (IATG's, ISO, etc.), environmental issues, security constraints, land ownership, planning permission, access to location , access to services (water, sewage, electricity etc), and ownership of land and completed buildings?

What are the security requirements of the location – is the location or any of its aspects classified; would access to the location or any related documents require special permissions/vetting; if so what are the legally prescribed requirements and deadlines for obtaining the necessary security clearances, etc.

What will be the pS's contribution to the design, construction, running costs and maintenance of the entire location, as well as specific building(s)?

At the end of Stage 1, a document should be produced setting out an outline statement of requirement (e.g. spatial, technical, project requirement and other issues), site information and assumptions for the life-cycle ownership, use and costs of the proposed infrastructure upgrade for SALW and SCA.

A review of the options and outline costs should be conducted at this stage to determine whether the overall project is viable, practical and achievable.

Key messages:

- *Upon assistance request, engage with and assist the requesting pS developing a (general) conceptual idea of the construction project, i.e. a feasibility study on infrastructure upgrades for*

SALW and SCA. It should be noted that examples of such projects include typically safety and security upgrades at SALW and CA storage sites, but also developing demilitarization, information management, training and service dogs (canine) infrastructure.

- *Request a document that certifies that the location/facility is under the ownership of the assistance requesting pS.*
- *To check in local authority status of location/facility according valid space/urban/ plans in case to be possible to make preparation of design /study etc. and construction activities on location/facility/building in accordance with valid space/urban/ plans*
- *Consult with the colleagues in the Field Operation, as well as the relevant staff of the assistance requesting pS about the local construction requirements and procedures.*
- *Understand and factor in the security vetting and clearance procedures for the project staff and associates accessing the proposed infrastructure upgrade for SALW and SCA.*
- *Ideally, an internal OSCE project development team - who can jointly contribute to the development of a detailed construction project plan - should be established. The project team should, at minimum consist of project manager, preferably also construction manager, an experienced local construction engineer as well as designated procurement staff. Subject to the project needs the local construction engineer can be contracted on long- or short-term basis to be engaged different phases of project life cycle; for example, he/she assists in determining the requirements for the infrastructure project, develops or reviews the Bill of Quantity, establishing QA/QC system, executes the monitoring of the construction works and services, verifies at any stage of the project construction works.*
- *The OSCE executive structure with the assistance requesting pS sets up joint working group for the specific infrastructure upgrade for SALW and SCA on at the very beginning of the project. The relevant decision-makers and specialist from the relevant end user of the assistance requesting pS as well as other relevant authorities should provide necessary inputs in the process of construction project life cycle as well as validate the results of the construction works at any stage.*
- *Identify does the intervention, and how, contributes to other high-level outcomes beyond SALW and SCA control. For example, will the intervention contribute to disaster risk reduction, how it will impact the civilian environment surrounding the location, etc.*
- *Develop an outline statement of requirement and assumptions and share that document with the pS for their final review, input and official endorsement. In such a way, the project will transparently demonstrate its practical outcomes, manage expectations on all sides, and adequately document the scope, scale and rationale of the infrastructure upgrade.*

7.5 Stage 2: Project definition

7.5.1 Prepare design specifications

Assuming the construction project is considered to be viable, practical and achievable, the next stage is to prepare a detailed statement of the requirement, also referred to as the 'design specifications'. Depending on the scale, complexity and cost of the project it may be appropriate to specify the requirement in terms of 'essential' and 'desirable' specifications. This should enable the OSCE project managers and recipients to discuss in details and establish agreement on concrete technical elements of the construction project and its implementation modus operandi before the works actually start.

The requirements should additionally also take note of gender equality considerations and are consistent with other national requirements such as providing access to disabled staff and visitors.

For infrastructure projects involving SALW and SCA, the design specifications should be consistent with the OSCE's Best Practice Guides[3] on SALW/CA, or with other suitable national or international guidance, which provides agreed levels of safety and security to people who will occupy the buildings and those living nearby.

At this stage it may be necessary to seek outline planning permission and other legal/statutory approvals, select and contract an appropriate service provider to carry out an environmental impact assessment, and select and contract a company to conduct site/location/facility appraisals including static and aseismic investigation of existing building, geodetic site survey report and geotechnical investigations[4]. Alternatively, such detailed work may be carried by the national authorities of the requesting pS and provided as an-kind contribution to the construction project. This work is needed at this early stage in the project to reduce the risk of delays or additional costs occurring later on.

7.5.2 Acquire engineering services

An ITB should be issued for engineering services in preparation of the construction project design documentation such as technical description of the project, including results of technical investigations, assessments and studies, if/when applicable, technical drawings, Bill of Quantity (BoQ) etc). For infrastructure projects, the ITB should follow the OSCE's normal procurement rules and guidelines and will include *inter alia* the terms of reference / scope of services and the tender evaluation process including the proposed marking scheme. ITB should also include reports of preliminary work such as environmental impact assessments, geodetic site survey report, static and aseismic investigation of existing facility/building and geotechnical study reports.

The responsibility of the assistance requesting State should be to ensure that the OSCE project development team, in particular, construction engineer, could meet and discuss with relevant specialists all technical matters in order to ensure that the design, specifications and plans are in conformity with local building code and requirements of the end user. Alternatively, the pS seeking assistance may offer to provide engineering services as in-kind support to the project; in this case, the OSCE project team should acquire the independent services to review / quality assurance in order to verify the results of such in-kind provided services. This enables the possibility for the corrections of the results of the services as well as customization/modification of the products against the OSCE procurement procedures.

7.5.3 Review construction plan[5], costs and project risks

The construction project plan(s), costs and project risks developed by the OSCE project team should be reviewed by the senior management of the OSCE executive structure and the relevant authorities of requesting pS. Upon requirement, donor pS may be involved in the process as well. This will ensure that the proposed design and costs meet the original design specifications, and available budget.

There are three ways to ensure controlling high costs of the construction project at this stage:

[3] The *OSCE Handbook of Best Practices on Small Arms and Light Weapons* (FSC Decision No. 5/03) and the *OSCE Handbook of Best Practices on Conventional Ammunition* (FSC Decision No. /08).

[4] The technical investigations, surveys and other studies ensure safe, quality and cost-efficient planning, design and implementation of the construction project.

[5] The construction plan includes technical documentation such as project design, technical investigations, assessments and studies, if/when applicable, technical drawings, Bill of Quantity etc.

(1) reduce the scope, i.e. removing some of the less important features in the design specifications;
(2) reduce the complexity of the design, especially those requiring specialised construction techniques and tools; and

(3) change the materials used, although care should be taken in changing to cheaper materials which may increase the cost of maintenance over the full life of the building, such as using painted steel rather than stainless or galvanised steel.

It may be necessary at this stage to revise the construction plan(s) and costs taking into consideration project risks.

7.5.4 Seek approval/authority for the construction phase

With construction plan(s) which meet(s) the design specifications, and with predicted costs which are consistent with the available budget, the next stage is to seek official approval and authority to select a contractor and proceed with the construction.

The form and scope of approval and authority will depend on national building code and legal/statutory requirements. If provisional planning permission has been given, then confirmation will be required based on the agreed plans. Formal approval should be sought in writing that the construction project design and other relevant documentation meet local building regulations. This is particularly important in areas prone to floods or earth tremors, or other threats to the stability and integrity of the building structure.

In the case of construction project design being developed abroad, it may be adapted and/or authorized in accordance with the national building code and legal/statutory requirements.

Key messages:

- Construction engineer or construction engineer service providers need to be certified/accredited in accordance with the local building code and legislation, but preferably equipped also with international certificates (ISO, environmental protection standards, etc.).
- Budget and use certified civil engineer to lead and revise technical work on development on construction project technical documentation, develop specific terms of references / tendering documentation for acquiring engineering services and construction works, provide technical advice in the OSCE project management and procurement processes, particiapt in the technical evaluation team/s for construction works, mentor the OSCE programmatic and procurement staff on civil engineering matters, etc.
- Budget and use certified specialists and/or service providers to perform technical investigations, assessments and studies for the construction projects (such as geodetic site survey report, environmental impact assessment, relevant appraisals, static and aseismic investigation of existing facility/building, geotechnical testing, etc.). If the host country authorities provide directly such services as in-kind contribution to the construction project, use independent certified specialists and/or service providers to QA their results.
- In the process of developing construction project design specifications and engineer(s) solutions the requirements in terms of ‘essential’ and ‘desirable’ specifications should be determined; moreover, the conditions on the local construction market, including provision of specialist services (i.e. certified provider of surveillance equipment), that subsequently impact the implementation of the construction project shall be taken into consideration.

- The review of the proposed construction plans, costs and project risks has to be consulted with and cleared by technical and decision-making levels of the OSCE executive structure, the host country authorities, and, if required, donors. The construction project should be considered as a "joint venture" with shared responsibility.
- An official authorization in writing from the relevant national authorities of their technical approval/authority for the proposed project design and budget should be in place prior commencing next stage of the construction project.
- An overarching Memorandum of Understanding and/or the construction project specific agreement between the OSCE executive structure and the host country authorities should be in place preferably prior to the commencement of the next stage of the construction project. Such agreements are necessary among others to ensure access to the construction sites, address the issues related to liabilities, sustainability and official hand-over of the construction works and services. This arrangement should be applied, if the OSCE executive structure executes construction works via the Implementing Partner/Service provider.
- Gender equality and disability considerations in OSCE safety and security infrastructure upgrades for SALW and SCA project should be already considered at the conceptual and design stage of the construction project.

7.6 Stage 3: Project delivery

7.6.1 Construction project implementation strategy

Subject to the scope of works and complexity of the construction project, there may be a requirement to develop the construction project implementation strategy by the OSCE project development team; the senior management of the OSCE executive structure should endorse such an implementation strategy. The purpose of the latter is to facilitate the execution of the construction project as well as efficiency measured in time, costs and quality. Its elements include among others outlining options and selection of procurement method, which takes into account the conditions on the (local) construction works and services market, preferred construction modus operandi, construction risk analysis, maintenance of building considerations as well as considerations for drafting construction contract etc.

The construction project implementation strategy should provide the overall guidance for further development of the ITB.

7.6.2 Issue ITB for construction and oversight (quality assurance)

At the beginning of this stage, an ITB should be prepared and issued for the construction work and supporting services. The ITB should follow the OSCE's normal procurement rules and guidelines and will include inter alia the design specifications including drawings, results of the applicable technical investigations, surveys and studies, and technical other requirements such as license for construction works, equipment list, master schedule and milestones, methodology, materials specifications, performance security form/bank guarantee etc.

The ITB should include the draft contract for the construction works, including the general conditions of the contract[6], as well as explanation of the tender evaluation process including the selection methods and, if applicable, the proposed marking scheme. The OSCE senior management of the executive structure should consider quality and cost selection method as feasible one due to technical

[6] At the time of development of this GNAP, the OSCE didn't poses specific OSCE General Conditions of Contract for Works, but only for Services and Goods.

complexity and requirements of the construction project/s and subsequent OSCE reputational risks involved.

If required by the local building code and legal requirements, the ITB for the external oversight (quality assurance) service provider should be issued as well. Such kind of oversight ensures that the construction project is being properly managed and delivered in accordance with prescribed costs, foreseen timetable as well as quality and risks considerations.

7.6.3 Select and contract construction works and oversight (quality assurance) contractors

The selected construction works contractor with valid license for construction works should be chosen in accordance with the tender evaluation process pursuant to the ITB. The process must be fully transparent with every effort made to ensure due diligence and compliance.

Following the selection process, the OSCE executive structure enters into contract negotiation and contracting of the contractor. The OSCE uses its standardized type of contract for the construction works supplemented by the OSCE general conditions of contract. If the contract doesn't include specific references to penalties, delays, indemnity etc., it should as a minimum make a reference to the OSCE general conditions of contract.

Upon programmatic requirement (due to complexity of the construction project) and/or if required by the local building code and legal requirements, the external, construction project oversight (quality assurance) service provider should be contracted as well.

Both contractors for construction works and oversight – including all individuals and vehicles accessing the project site - should be vetted/cleared by the relevant national partner (end user) and other agencies prior to the commencement of works and services.

7.6.4 Commencement and delivery of construction works

Construction should commence as planned and as agreed in the contract and supplemented by the OSCE general conditions of contract. For infrastructure projects there are often some unknowns, for example geotechnical investigations may not identify all sub-surface conditions and changes may need to be made to provide a sufficiently strong and stable platform under the building(s) or on existing facility/building is possible to increase with unpredictable activities due to absence of or limited amount of technical data. An allowance/contingency for such uncertainties should be included in the project contract and budget.

7.6.4 Construction project monitoring and control

The OSCE infrastructure projects may require establishing two-tier construction project monitoring and control, i.e. internal and external (independent) one. The first is carried out by the OSCE project development team with the significant role of the construction manager and/or engineer; the second, if applicable, is carried out by the contracted construction oversight service provider.

The regular oversight/QA measures, i.e. monitoring and control, should be implemented at each stage/milestone of the construction, e.g. preparation of the construction site, executing earth works, laying foundations, construction of building and structures, roofing / enclosing structures etc. If not detected and addressed, the building 'imperfections' at each stage/milestone of the construction have negative impact of subsequent construction works in terms of delays and costs and subsequent use of the building.

Therefore, the contracted external construction oversight service provider should inspect construction works in all engineering areas, record their findings and verify against local building code. For SALW and SCA infrastructure projects it should also include for example intruder detection system, surveillance systems such as closed-circuit television (CCTV), fire suppression and security access monitoring systems. It is likely that such systems will be supplied and installed by a specialist sub-contractor with a security licence issued by the relevant national authority in accordance with applicable national laws and regulations.

The OSCE project development team also executes QA of the external construction oversight service provider. Moreover, the OSCE project development team should encourage implementing construction project monitoring and control jointly with the project beneficiary (end user); such measure would subsequently contribute to enhancing project ownership and final validation of the construction project by project beneficiary (end user). Upon requirement, and possibilities, donors should be allowed to executed their monitoring and control function.

Key messages:

- The ITB for construction works – for example, development of ITB documentation, advertising, evaluating and contracting – may be challenging and time consuming effort demanding "team approach" by the OSCE executive structure. As the knowledge and skills on ITB for construction works are unevenly dispersed among the OSCE executive structures, interaction on horizontal and vertical levels in their transfer is of utmost importance.
- The OSCE DMF/FAU may refer to FIDIC's Orange Book - Conditions of Contract for Design-Build and Turnkey and Red Book - Conditions of Contract for Construction for technical guidance in developing, negotiating and concluding the contract with the selected bidder, i.e. contractor.
- Upon receiving the contract, the contractor for construction works should develop and regular review detailed "operational/execution plan" in consultations with and approved by the OSCE project development team. Such a plan should be sufficiently flexible to enable meeting target construction timelines/milestones and fast-tracking of works, mobilizing and allocating sufficient construction resources and services on time, in appropriate quantity and quality, ensuring health and safety regulations on the project site, etc.
- The OSCE project development team should take into consideration that almost all SALW and SCA infrastructure projects require security and safety considerations to be factored in at all times. Vetting of all project personnel (including subcontractors), their access to the location, as well as delivery or personnel, material and installations needs to be properly and in advance to several echelons of the beneficiary institutions.
- Ensure regular coordination with and monitoring of the contractor by implementing progress meeting and project site visits at minimum every fortnight. The distance and/or remoteness to the project site should not provide the limitations to the OSCE project development team to carry out coordination and monitoring of construction works on the project site. The contractor should provide regular project execution progress report at minimum every fortnight.
- Several OSCE executive structures noted positive practice of using external, independent construction project oversight to reduce the risks of project delivery delays, unsuitable/inadequate quality and increase in costs. This service provider should provide independent reports regularly, e.g. for each quality and quantity check and each HQ and site visit.

- Upon possibility, selectively include the representatives of project beneficiary (end user) and/or donors in the process of construction project tendering and execution. This enables transparency and confidence building in the OSCE procedures.

7.7 Stage 4: Project closure

7.7.1 Inspection of practical completion

Certifying practical completion – technical acceptance of construction works - is a very important project milestone and has the effect of:

- Making a final payment to the contractor, other than an amount retained to ensure the contractor fixes minor defects or omissions in the building works;
- Ending the contractor's liability for liquidated damages (damages that become payable in the event there is a breach of contract by the contractor - generally by failing to complete the works by the agreed completion date); and
- Signifying the beginning of the defects liability period.

Inevitably, the process of inspection – executed jointly with the beneficiary (end user) - will produce a list of minor defects or omissions in building works for the contractor to rectify. Inspections should not take place without a proper 'builder's clean', the removal of any protective material and the operation of full, permanent lighting. On large projects the inspection process may need to be carried out in sections as areas are progressively completed and closed off.

In such circumstances, inspections may begin months before overall project completion. This may mean that some areas are physically complete but without the building services having been tested or commissioned as they are not operational. This should be recorded. Access to inspected and closed-off areas should be tightly controlled to prevent deterioration and will require final inspection just prior to handover.

7.7.2 Handover of completed building(s) to the intended 'owner/user' of the building(s)

The handover of the site to the 'owner/user' takes place once the OSCE project manager has confirmed that the works defined in the contract are complete and the requesting pS authorities verify (technical authority for construction works) and validate (project beneficiary/end user) construction works.

Handover may take place during a handover meeting following a joint inspection of the site by the OSCE project development team, the contractor and the project beneficiary (end user). During the handover, the 'owner/user' should be issued with:

- Keys, fobs and controls required for access to building(s) and proper use of the facilities;
- Up to date testing and commissioning data;
- All certificates and warranties in respect of the works (including the designs, engineering plans, technical documentation, warranty certificates for the accompanying equipment installed at the location, etc.);
- Copies of statutory approvals, waivers, consents and conditions;

- Equipment test certificates; and
- Licences such as permission to store and use explosives, chemicals and gases.

Key messages:

- The construction contractor, but also internal and external engineering oversight providers, should meticulously record the progress of construction works, including photographic evidence, and receipts of acknowledgement should be filed. This include coordination and specific decisions taken and/or confirmed by the stakeholders (at minimum customer, contractor and beneficiary/end user) in the project that may influence the project implementation, e.g. change of materials used, change/modification of structures in the building, equipping the building, etc. Subsequent defects and dissatisfaction with the building as a whole or its the completed building, may become the subject to request to the building's modification after the handover or in the worst case become the subject of litigation long after completion as occupants can cause damage after handover.
- The defects liability/warranty period, which follows certification of practical completion, is not a chance to correct problems apparent at practical completion, it is the period during which the contractor may be recalled to rectify defects which appear. If there are defects apparent before practical completion, then these should be rectified before a certificate of practical completion is issued. Subject to the scope and complexity of construction works, the OSCE in the construction contract should consider this period to extend for up to one (1) year, i.e. expose the building to the influence of all four seasons.
- In addition to the practical, final completion of construction works, the OSCE can exercise preliminary technical acceptance of the construction works and/or separate preliminary site acceptance for the construction projects with more than EUR 50,000. This can be done due to various reasons such as budgetary pressures or time pressure derived from the financing/donation(s) expiration date(s). In this case, the external construction oversight provider and the beneficiary/end user check and confirm so far completed works, including related construction documentation such as certificates for specific works/completed phases, and/or performs preliminary site acceptance test. Subsequently, the OSCE project manager approves disbursement of payment in the value of 80 percent of each item/activity to the contractor.

8. Mapping the key stages of an infrastructure project to the OSCE assistance process

Infrastructure projects are one type of OSCE assistance project, and the advice provided in this Guidance Note should be applied alongside the advice provided in GNAP 02. For example, the activities described here as **Stage 1** (Identify the purpose/need of the buildings) form part of **Preparations for request** which are described in GNAP 02. Indeed, most of the questions included in Stage 1, such as "..... has the pS already identified a site? Who will use and manage the new or upgraded buildings? How will the buildings be maintained, and by whom?" are likely to be addressed during the pre-feasibility study and confirmed during the expert assessment visit.

An explanation of how the key stages of an infrastructure project apply to the activities in GNAP 02 are shown diagrammatically at Annex D.

9. Responsibilities

A summary of the responsibilities for SALW/SCA infrastructure projects managed by CPC and/or OSCE field missions is given at Annex E.

Annex A
References

The following **normative** documents contain provisions, which, through reference in this text, constitute provisions of this part of the informative guide:

a) OSCE Document on SALW (FSC.DOC/1/00/Rev.1 dated 20 June 2012);

b) OSCE Document on SCA (FSC.JOUR/413 dated 19 November 2003);

c) OSCE Provisional Financial / Administrative Instruction (FAI) 6: Procurement and contracting; and

d) OSCE Procurement and Contracting Manual, Revision 2014.

e) OSCE Instruction to Bidders – Invitation for Bids (Works)[7]

f) OSCE General Conditions of Contract (Services)[8]

The following **informative** documents contain provisions, which, through reference in this text, constitute provisions of this part of the informative guide:

a) Project Management in the OSCE: A Manual for Programme and Project Managers (OSCE: 2010, ISBN: 978-92-9234-301-9);

b) ISO 15686 – Service life planning – buildings and constructed assets.

The latest version/edition of these references should be used. The CPC/FSC Support Section holds copies of all references used in this guide. pS and other interested bodies, organisations and individual technical experts should obtain copies of the latest version/edition of these references before commencing an OSCE SALW/SCA assistance project.

[7] Accessible at https://procurement.osce.org/resources/document/instructions-bidders-invitation-bids-works
[8] Accessible at https://procurement.osce.org/resources/document/general-conditions-contract-services

Annex B
(Informative)
Glossary of terms, definitions and abbreviations

Area Space either within or outside a structure or location, designated for a specific purpose, as recreation and/or parking area

BoQ - Bill of Quantity A document used in tendering in the construction industry in which materials, parts, and labor (and their costs) are itemized. It also (ideally) details the terms and conditions of the construction or repair contract and itemizes all work to enable a contractor to price the work for which he or she is bidding. The quantities may be measured in number, area, volume, weight or time. Preparing a bill of quantities requires that the design is complete and a specification has been prepared.

Building A more or less enclosed and permanent structure for housing, commerce, industry, etc., distinguished from mobile structures and those not intended for occupancy.

Building code A collection of rules and regulations adopted by authorities having appropriate jurisdiction to control the design and construction of buildings, alteration, repair, quality of materials, use and occupancy, and related factors of buildings within their jurisdiction; contains minimum architectural, structural, and mechanical standards for sanitation, public health, welfare, safety, and the provision of light and air.

Civil Engineering This is a professional engineering discipline that deals with creating, improving, and protecting the environment. It provides the facilities for the built environment and includes environmental, geotechnical, materials, municipal, structural, surveying, transportation, and water engineering

Construction
1. All the on-site work done in building or altering structures, from land clearance through completion, including excavation, erection, and the assembly and installation of components and equipment.
2. A structure.

Construction design A process of creating the description/solution of a new building and other facilities, usually represented by detailed instructions, i.e. plans and specifications, allowing that solution to be constructed.

Construction oversight The observation and inspection of construction work in order to ensure conformity with the contract documents and local building code.

Construction manager
1. A person who is appointed by the owner to work as the owner's agent in the construction work, preparing bidding documents and contract documents, arranging construction contracts, and managing the contractors so that all work on

	the project is completed on time and within budget, in accordance with contractual agreements. 2. The person who has been designated by the owner to provide special management services during the construction phase of a building project.
Construction management	The special management services performed by the engineer or others during the construction phase of the project, under separate or special agreement with the customer.
Construction works	Development of the service life of a building component, building or other constructed work like a bridge or tunnel.
FIDIC	International Federation of Consulting Engineers
Implementation strategy	A document describing how the project shall be implemented, and it involves procurement, construction, operation and maintenance. Here, the actual issue is how innovation and efficiency is facilitated in these processes.
Infrastructure	1. The physical public systems, services, and facilities of a country that are necessary for society and economic activity. These include buildings, roads, bridges, and utilities (electricity, gas, water, sewers, and telecommunications). 2. The basic equipment of a building that is necessary for the building to serve its intended function.
Quality Assurance	The inspection, testing, and other relevant actions taken (often by an owner or his representative) to ensure that the desired level of quality is in accordance with the applicable standards or specifications for the product or work.
Quality Control	The inspection, analysis, and other relevant actions taken to provide control over what is being done, manufactured, or fabricated, so that a desirable level of quality is achieved and maintained.
Risk management	In the building industry, the systemized practice of avoiding potential risks, such as culpability and liability or legal entanglements.
Structure	A combination of units constructed and so interconnected, in an organized way, as to provide rigidity between its elements.
Verification	The evaluation of whether or not a product, service, or system complies with a regulation, requirement, specification, or imposed condition. It is often an internal process. Contrast with validation.
Validation	The assurance that a product, service, or system meets the needs of the customer and other identified stakeholders. It often involves acceptance and suitability with external customers. Contrast with verification.

Annex C
(Informative)
ISO Standards and Other Guidelines for Construction

i. ISO Standards for Construction

Structures

- **ISO/TC 98,** *Bases for design of structures,* lays down the basic requirements for the design of structures. With standards focusing especially on terminology and symbols, loads and forces, it ensures constructions are built to last and can withstand outside forces such as extreme weather events and natural disasters.
- **ISO/TC 167,** *Steel and aluminium structures*, develops standards that specify requirements for the structural use of steel and aluminium alloys in the design, fabrication and erection of buildings and civil engineering works.
- **ISO/TC 165,** *Timber structures,* deals with the strength and load requirements of structural timber, while geotechnical analysis (interactions between soil and structure) is the focus of ISO/TC 182, Geotechnics.

Energy performance and sustainability

- **ISO/TC 163,** *Thermal performance and energy use in the built environment*, has more than 130 standards providing guidelines and methods for the calculation of energy consumption in buildings, covering areas such as heating, lighting, ventilation and so forth.
- **ISO/TC 205,** *Building environment design,* has a range of standards defining methods and processes for the design of new buildings and retrofit of existing buildings, to create acceptable indoor environments and practicable energy conservation and efficiency.
- **ISO 21930,** *Sustainability in buildings and civil engineering works – Core rules for environmental product declarations of construction products and services,* which establishes good practices for making environmental claims and communications in the construction sector.

Fire safety and fire-fighting

- **ISO/TC 21,** Equipment for fire protection and fire-fighting, develops standards covering fire protection and fire-fighting apparatus and equipment, including fire extinguishers and fire and smoke detectors.
- **ISO/TC 92,** *Fire safety,* develops standards for assessing fire risks to life and property and mitigating such risks by determining the behaviour of construction materials and building structures.
- **ISO 7240,** *Fire detection and alarm systems,* defines the specifications of fire detection and alarm system equipment used in and around buildings – including their testing and performance – in order to ensure they function effectively.

Design life, durability and service life planning

- **ISO/TC 59/SC 14,** *Design life,* develops standards that offer a methodology and guidance on how to plan the service life of buildings, including predicting costs and the frequency of maintenance and repairs over their life cycle.

ii. Other Guidelines for Construction

Contracting of construction works

- **The FIDIC Golden Principles 1st** Ed (FIDIC: 2019, fidic.org/sites/default/files/_golden_principles _1_12.pdf)
- **Conditions of Contract for Design - Build and Turnkey 1st Ed** (1995 Orange Book) (FIDIC: 1995, ISBN: 2-88432-010-5)
- **Construction Contract 2nd Ed** (2017 Red Book) (FIDIC: 2017, ISBN: 978-2-88432-084-9)

International standards, best practices and guidance pertinent to SALW/SCA infrastructure

- **OSCE Handbook of Best Practices on Small Arms And Light Weapons** (FSC.DEC/5/03 dated 19 September 2003), www.osce.org/files/f/documents/e/a/13616.pdf, specifically on:
  - National Procedures for Stockpile Management and Security
  - National Procedures for the Destruction of Small Arms and Light Weapons

- **OSCE Handbook of Best Practices on Conventional Ammunition** (FSC.DEC/6/08 dated 18 June 2008), https://www.osce.org/files/f/documents/5/5/33371.pdf, specifically on:
  - Procedures for Management of Stockpiles of Conventional Ammunition
  - Physical Security of Stockpiles of Conventional Ammunition
  - Destruction of Conventional Ammunition

- **Modular Small-arms-control Implementation Compendium (MOSAIC)**, https://www.un.org/disarmament/convarms/mosaic/, specifically on:
  - 05.20 Stockpile management: Weapons
  - 05.50 Destruction: Weapons

- **International Ammunition Technical Guidelines (IATG),** https://www.un.org/disarmament/un-saferguard/guide-lines/, specifically series on:
  - 04 - Explosive Facilities (Storage) (Field and Temporary Conditions)
  - 05 - Explosives Facilities (Storage) (Infrastructure and Equipment)
  - 06 - Explosive Facilities (Storage) (Operations)
  - 10 - Ammunition Demilitarization and Destruction

Annex D
Mapping the key stages of an infrastructure project to the OSCE assistance process for SALW/SCA

OSCE assistance process → / Key stages of Infrastructure project ↓		Request for assistance: Prepare for formal request for assistance	Request for assistance: Submit request for assistance	Consultations about request	Expert assessment visit: Conduct expert assessment visit	Expert assessment visit: Provide assessment report	Identify operational / financial implications	Produce detailed project proposal and plan	Execution: Inception / mobilisation phase	Execution: Execution phase	Execution: Monitoring and controlling	Project closure and final report	Remarks
Stage 1	Identify the purpose/need of the building(s)												
Stage 2	Prepare design specifications												
	Acquire engineering's services												
	Review plans, costs and project risks												
	Seek approval/authority for the construction phase												
Stage 3	Construction project implementation strategy												
	Issue ITB for construction and oversight (quality assurance)												
	Select and contract contractors												
	Commencement and delivery construction												
	Monitoring and project control												

OSCE assistance process → Key stages of Infrastructure project ↓		Request for assistance		Consultations about request	Expert assessment visit		Identify operational / financial implications	Produce detailed project proposal and plan	Execution			Project closure and final report	Remarks
		Prepare for formal request for assistance	Submit request for assistance		Conduct expert assessment visit	Provide assessment report			Inception / mobilisation phase	Execution phase	Monitoring and controlling		
Stage 4	Inspection of practical completion												
	Handover to the intended 'owner/user'												

Annex E

Summary of the responsibilities for OSCE infrastructure projects

Project stakeholders → / Key stages of Infrastructure project ↓		pS requesting assistance	pS providing assistance	OSCE decision-making bodies (PC, FSC ….)	CPC/OSCE field mission	Implementing organisations	Remarks
Stage 1	Identify the purpose/need of the building(s)	L	I	I	S		
Stage 2	Prepare design specifications	S	I		L		
	Acquire engineering's services	I	I		S	L	
	Review plans, costs and project risks	I	I		L	S	
	Seek approval/authority for the construction phase	S			L		
Stage 3	Construction project implementation strategy	S	I		L		
	Issue ITB for construction and oversight (quality	I	I		L		
	Select and contract contractors	I	I		L		
	Commencement and delivery construction	S	I	I	S	L	
	Monitoring and project control	S	I		L		

Project stakeholders → / Key stages of Infrastructure project ↓		pS requesting assistance	pS providing assistance	OSCE decision-making bodies (PC, FSC ….)	CPC/OSCE field mission	Implementing organisations	Remarks
Stage 4	Inspection of practical completion	S	I		L	S	
	Handover to the intended 'owner/user'	S	I		L	S	

Key: L Lead organization / individual **S** Supporting organization / individual **I** Interested organization / individual (to be kept informed)

Amendment record

Number	Date	Amendment Details
1		
2		
3		
4		