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REQUEST FOR PROPOSAL (RFP)

National Open Bidding	DATE: 22 October 2020
	REFERENCE: RFP/180/IND-2020

Dear Sir / Madam:

UNDP, on behalf of UNODC, request to submit your proposal for “**Hosting and technical maintenance of the educational mobile game – Zorbs Reloaded**”

Please be guided by the form attached hereto as Annex 2, in preparing your Proposal.

- Annexure 1 – Description of Requirements
- Annexure 2 – Terms of Reference
- Annexure 3 – Form for submitting service provider’s Technical proposal
- Annexure 4 – Form for submitting service provider’s Financial proposal
- Annexure 5 – General Terms and Conditions of the Contract
- Annexure 6 – Technical Details
- Annexure 7 – Development procedures and security requirements
 - 7 (a) Access control for United Nations Secretariat
 - 7 (b) Software Development Technical Procedure
 - 7 (c) Minimum Security Requirements

Proposals may be submitted on or before the deadline indicated by UNDP in the e-tendering system. Proposals must be submitted in the online e-tendering system in the following link: <https://etendering.partneragencies.org> using your username and password. If you have not registered in the system before, you can register now by logging in using:

Username: event.guest

Password: why2change

.....and follow the registration steps as specified in the system user guide.

Your Proposal must be expressed in English language, and valid for a minimum period of One Hundred and Twenty (120) days.

You are kindly requested to indicate whether your company intends to submit a Proposal by clicking on **“Accept Invitation”**.

In the course of preparing and submitting your Proposal, it shall remain your responsibility to ensure that it submitted into the system by the deadline. The system will automatically block and not accept any bid after the deadline. Kindly ensure that supporting documents required are signed and in the .pdf format, and free from any virus or corrupted files.

The Financial Proposal and the Technical Proposal files MUST BE COMPLETELY SEPARATE and uploaded separately in the system and clearly named as either “TECHNICAL PROPOSAL” or “FINANCIAL PROPOSAL”, as appropriate. Each document shall include the Proposer’s name and address. The file with the “FINANCIAL PROPOSAL” must be encrypted with a password so that it cannot be opened nor viewed until the Proposal has been found to pass the technical evaluation stage. Once a Proposal has been found to be responsive by passing the technical evaluation stage, UNDP shall request the Proposer to submit the password to open the Financial Proposal. The Proposer shall assume the responsibility for not encrypting the financial proposal.

The Proposal that complies with all of the requirements, meets all the evaluation criteria and offers the best value for money shall be selected and awarded the contract. Any offer that does not meet the requirements shall be rejected.

Any discrepancy between the unit price and the total price shall be re-computed by UNDP, and the unit price shall prevail and the total price shall be corrected. If the Service Provider does not accept the final price based on UNDP’s re-computation and correction of errors, its Proposal will be rejected.

No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by UNDP after it has received the Proposal. At the time of Award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any Contract or Purchase Order that will be issued as a result of this RFP shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a Proposal implies that the Service Provider accepts without question the General Terms and Conditions of UNDP, herein attached as Annex 3.

Please be advised that UNDP is not bound to accept any Proposal, nor award a contract or Purchase Order, nor be responsible for any costs associated with a Service

Providers preparation and submission of a Proposal, regardless of the outcome or the manner of conducting the selection process.

UNDP's vendor protest procedure is intended to afford an opportunity to appeal for persons or firms not awarded a Purchase Order or Contract in a competitive procurement process. In the event that you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link:

<http://www.undp.org/content/undp/en/home/operations/procurement/protestandsanctions/>

UNDP encourages every prospective Service Provider to prevent and avoid conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, cost estimates, and other information used in this RFP.

UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to preventing, identifying and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its Service Providers to adhere to the UN Supplier Code of Conduct found in this link : http://www.un.org/depts/ptd/pdf/conduct_english.pdf

Thank you and we look forward to receiving your Proposal.

Issued by:

Approved by:

Name: Vijay K. Thapliyal
Title: [Procurement Assistant]
Date: October 22, 2020

Name: [Arun Arumughan]
Title: [Procurement Analyst]
Date: October 22, 2020

Description of Requirements

Context of the Requirement	<p>The Education for Justice (E4J) initiative was created as part of the UNODC Global Programme for the Implementation of the Doha Declaration, launched in 2016. The main goal of E4J is to develop and disseminate education materials on the issues of crime prevention, criminal justice and other rule of law aspects at the primary, secondary and tertiary levels worldwide.</p> <p>As part of this innovative initiative, a mobile game was developed for secondary-level students, called Zorbs Reloaded. This game is based on an RPG component, as well as quizzes on the Sustainable Development Goals and targets linked to crime prevention, criminal justice, and other rule of law aspects. This requirement is for the hosting and technical maintenance of this game in the browser, iOS and Android versions.</p>
Implementing Partner of UNDP	Direct implementation by UNODC
Brief Description of the Required Services	<p>UNDP and UNODC seek to hire a vendor to host and technically maintain the Zorbs Reloaded game, including fixing issues and publishing updates for the online and mobile telephone application versions.</p> <p>Please refer to Annex 2 (Terms of References) for full details.</p>
List and Description of Expected Outputs to be Delivered	<p>The scope of this assignment is the hosting and technical maintenance of the Zorbs Reloaded game in the browser, iOS and Android versions.</p> <p>The Service Provider is expected to deliver the following:</p> <p>Deliverable 1:</p> <ul style="list-style-type: none">- Plan for absorption of technology through transfer from original developer, if applicable; <p>Deliverable 2:</p> <ul style="list-style-type: none">- Report on the absorption of technology through transfer from original developer, if applicable;- Maintenance plan which includes the rollout of the three already developed and integrated extensions and the addition of new languages (one new language each in two months)

	<p>Deliverable 3:</p> <ul style="list-style-type: none"> - Bi-monthly hosting and technical maintenance report (November-December 2020); <p>Deliverable 4:</p> <ul style="list-style-type: none"> - Bi-monthly hosting and technical maintenance report (January-February 2021); <p>Deliverable 5:</p> <ul style="list-style-type: none"> - Bi-monthly hosting and technical maintenance report (March-April 2021); <p>Additional (bi)monthly hosting and technical maintenance may be contracted, subject to the needs of UNDP/UNODC.</p> <p>Refer to Annex 2 (Terms of Reference) for full details.</p>
Person to Supervise the Work/Performance of the Service Provider	Crime Prevention and Criminal Justice Officer, UNODC
Frequency of Reporting	Monthly, or more often if requested.
Progress Reporting Requirements	The agency in the course of performing the work, is expected to interact with E4J/UNDP/UNODC through UNODC.
Location of work	<p>At Contractor's Location.</p> <p>The agency is not required to be physically present at the UN office. However, agency must be available to connect on CET (Central European Time zone) whenever reporting is scheduled. Agency may use remote communication meant (Skype, Phone etc.) for those purposes.</p>
Expected duration of work	Six months, with a possibility of extension, subject to the needs of UNDP/UNODC.
Target start date	15 November 2020 with a possibility of extension of the contract, subject to the needs of UNDP/UNODC.
Latest completion date	15 May 2021 with a possibility of extension of the contract, subject to the needs of UNDP/UNODC.
Travels Expected	No travel required

Special Security Requirements	<input checked="" type="checkbox"/> Others [Not Applicable]			
Facilities to be Provided by UNDP (i.e., must be excluded from Price Proposal)	<input checked="" type="checkbox"/> Others [Not Applicable]			
Implementation Schedule indicating breakdown and timing of activities/sub-activities	<input checked="" type="checkbox"/> Required			
Names and curriculum vitae of individuals who will be involved in completing the services	<input checked="" type="checkbox"/> Required			
Currency of Proposal	Preferred Currency of Bid : Indian Rupees (INR) Bids in other currency also allowed. <i>Reference date for determining UN Operational Exchange Rate : Date of bid submission</i>			
GST on Price Proposal	<input checked="" type="checkbox"/> must be exclusive of GST, which will be paid as applicable			
Validity Period of Proposals (Counting for the last day of submission of quotes)	<input checked="" type="checkbox"/> 120 days In exceptional circumstances, UNDP may request the Proposer to extend the validity of the Proposal beyond what has been initially indicated in this RFP. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Proposal.			
Partial Quotes	Not permitted.			
Payment Terms	Outputs	Percentage	Timing	Condition for Payment Release
	Deliverable 1: plan for absorption of technology through transfer from original developer, <u>if applicable</u> ;	20%	1 week	Within thirty (30) days from the date of meeting the following conditions: a) UNDP's written acceptance (i.e., not
	Deliverable 2: report on the absorption of technology through	20%	2 weeks	

	transfer from original developer, if applicable;			mere receipt) of the quality of the outputs; and b) Receipt of invoice from the Service Provider.
	Deliverable 3: monthly hosting and technical maintenance report;	20%	8 weeks	
	4. Bi-monthly hosting and technical maintenance report (January-February 2021)	20%	8 weeks	
	5. Bi-monthly hosting and technical maintenance report (March-April 2021)	20%	8 weeks	
	Note: <u>Deliverables 1 and 2 will only be expected if the vendor requires the absorption of technology from the current supplier.</u>			
Person(s) to review/inspect/ approve outputs/completed services and authorize the disbursement of payment	Crime Prevention and Criminal Justice Officer, UNODC			
Type of Contract to be Signed	<input checked="" type="checkbox"/> Contract for Services			
Criteria for Contract Award	<input checked="" type="checkbox"/> Compliance on Preliminary Examination of Proposals <input checked="" type="checkbox"/> Compliance on Essential Eligibility/Qualification requirements <input checked="" type="checkbox"/> Highest Combined Score (based on the 70% technical offer and 30% price weight distribution). <u>The minimum technical score required to pass is 70%.</u> <input checked="" type="checkbox"/> Full acceptance of the UNDP Contract General Terms and Conditions (GTC). This is a mandatory criterion and cannot be deleted regardless of the nature of services required. Non-acceptance of the GTC may be grounds for the rejection of the Proposal.			
Criteria for Preliminary Examination of Proposals	1. Technical proposal is submitted separately from Financial Proposal 2. Financial proposal must be password protected. If not, proposal will get rejected. 3. Latest Certificate of Registration of Business submitted			

	4. Is the Offeror, or any of its joint venture member, included in UN Security Council 1267 List and List of Suspended and Removed Vendors	
Criteria for Essential Eligibility/Qualification	Criteria	Supporting Document/s
	The agency must have at least 5 years of work experience or more in the field of mobile game development	List of relevant assignment with client name and other contract details; with copy of contract/ work order and completion certificate.
	Minimum 1 completed projects of hosting and technical maintenance of mobile games of similar size.	Copy of contract.
	Notes: 1. If bidders do not meet any of the above listed criteria, their proposals will not be considered for further evaluation. 2. Bidders meeting above listed criteria are required to submit evidences (details / Website links / documents) in support-otherwise proposal may be disqualified.	
Criteria for the Assessment of Proposal	<u>Technical Proposal (70%)</u> <input checked="" type="checkbox"/> Expertise of the Firm (30 marks) <input checked="" type="checkbox"/> Methodology, Its Appropriateness to the Condition and Timeliness of the Implementation Plan (20 marks) <input checked="" type="checkbox"/> Management Structure and Qualification of Key Personnel (20 marks) Please refer to Annex 2 (Terms of Reference) for qualifications and Annex 3 for the exact documents <u>Financial Proposal (30%)</u> To be computed as a ratio of the Proposal's offer to the lowest price among the proposals received by UNDP.	
UNDP will award the contract to:	<input checked="" type="checkbox"/> One and only one proposer.	
Deadline of Bid Submission	Date and Time: As specified in the system (note that time zone indicated in the system is New York Time zone).	

	<p><u>PLEASE NOTE:-</u></p> <ol style="list-style-type: none"> 1. Date and time visible on the main screen of event (on e-tendering portal) will be final and prevail over any other closing time indicated elsewhere, in case they are different. Please also note that the bid closing time shown in the PDF file generated by the system is not accurate due to a technical glitch that we will resolve soon. The correct bid closing time is as indicated in the e-tendering portal and system will not accept any bid after that time. It is the responsibility of the bidder to make sure bids are submitted within this deadline. UNDP will not accept any bid that is not submitted directly in the system. 2. Try to submit your bid a day prior or well before the closing time. Do not wait until last minute. If you face any issue submitting your bid at the last minute, UNDP may not be able to assist.
Conditions and Procedures for electronic submission and opening, if allowed	<p>☒ One file, containing Technical proposal (including CVs, registration certificate and all supporting documents).</p> <p>☒ One file, containing Financial Proposal (password encrypted). Password <u>must</u> not be provided to UNDP until it is formally requested by UNDP focal point.</p> <p>Note: We prefer uploading of pdf version of files on the eTendering portal. If one file is too bulky, may split into 4-5 files.</p>
Contact Person for Inquiries (Written inquiries only)	<p>Vijay K. Thapliyal Email: vijay.thapliyal@undp.org</p> <p>Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.</p>
Who can apply	<p>Proposals are invited from the institutions/organizations only. Proposal submitted by Individuals will not be accepted.</p>

Terms of References

A. Project Title

Hosting and technical maintenance of the educational mobile game [Zorbs Reloaded](#)

B. Project description

Education for Justice (E4J) initiative was formed as part of the UNODC Global Programme, which was launched in 2016. The main goal of E4J is to develop and disseminate education materials on the issues of crime prevention, criminal justice and other rule of law aspects at the primary, secondary and tertiary levels worldwide.

After a global expert group meeting, it was decided, that educational games are the best way to engage student at the secondary level. In order to involve the beneficiaries of the end products from day one, E4J team organized a series of youth engagement activities (hackathons) on different locations around the world. As a conclusion from those events, as well as extensive study of existing educational games, it was decided that a mobile educational game would have the biggest impact. Based on all that research done, the final idea has been developed - a mix-up application between a city builder game teaching values and a quiz-based RPG game teaching UNODC mandates. The idea was further developed into the game [Zorbs Reloaded](#), which is now available for browser, iOS and Android.

The game is based on the story about the Zorbs – a concept internally developed at UNODC/E4J aiming at teaching students rule of law and crime prevention values and skills. The backstory features four aliens from a planet, which was completely destroyed by improper behavior of its inhabitants. After escaping it, the four characters spend several years on Earth. The story of the game begins when the four Zorbs decide to travel back home and rebuild their planet. The users are tasked with helping them rebuild Zorb while preserving core values and preventing crime and violence.

C. Scope of work

The scope of this work is to undertake hosting and technical maintenance for the [Zorbs Reloaded](#) game. As such, the scope includes the following:

1. If applicable, learning, transferring the technology and becoming acquaintance with the game and all relevant features required for the hosting and technical maintenance;
2. Create a maintenance plan which includes the following:
 - a. A clear strategy on how troubleshooting will be function
 - b. Setting up of a bug tracker system
 - c. A plan for the rollout of the extension packs that have already been developed in the previous development stages of the game
 - d. A plan for the rollout of the new languages to be added (the content is provided by E4J team in an industry standard format (for i.e. csv, xls, etc.))

3. Timely addressing of both server side and client-side issues that were reported by the end users, the project owner, or identified by the development team. Delivery of a report on the issues that have been address.

D. Expected outcomes

The Contractor is expected to deliver:

1. Report of successful knowledge, data and account transfer (if applicable)
2. Maintenance plan
3. 3 reports on troubleshooting, issues addressed and hosting usage, for a total period of six months. Additional (bi)monthly periods may be contracted subject to the necessity of UNDP/UNODC.

*A technical specification of these components is available in **Annex 6 – Technical details***

Tests:

- Initial test plan to be provided at the first stage of the project (see deliverables for more information)
- Test results and text scripts to be provided at the final stage of the project.

E. Institutional Arrangement

- The direct supervisor of the Contractor will be UNODC. The Contractor is expected to report bi-weekly (or whenever necessary).
- The contractor in the course of performing the work, is expected to interact with UNDP/UNODC through the Education for Justice (E4J) initiative.
- The contractor is supposed to use its own Apple Developer Account and Google Play accounts to publish app. The transfer of technology should also contemplate the respective application stores as well as the browser version of the game.
- The contractor is not required to be physically present at the UN office. However, Contractor must be available to meet online whenever reporting is scheduled. The contractor may use remote communication means (Skype, Phone, etc) for those purposes.

F. Duration of the Work

The duration is expected to be six months. However, *additional maintenance periods may be contracted subject to the requirements of UNDP/UNODC.*

G. Qualifications of the Successful Contractor

- The contractor must have at least 3 years of work experience or more in the field of mobile game development.
- Minimum 1 year of experience in developing games of similar size.
- Minimum 2 completed projects of similar size.
- The contractor must be proficient in English. Knowledge of any other UN official language is an asset.
- The number of team members can be determined by the contractor. However, they must provide the resumes of at least one Project manager, Game developer and Game designer. *(For more information, please have a look at the next point – Qualification of team members)*

H. Qualifications of Team Members

The Contractor must have in their team at least one member from each of the following roles with the corresponding qualification

- Project manager:
 - Must have at least five (5) years of experience in managing project in the field of game development.
 - Must have managed at least 2 projects with a size and scope similar to the [Zorbs Reloaded](#).
 - Must have sound experience with agile development methodologies.
- Game developer:
 - Must have at least five (5) years of experience in developing mobile games.
 - Must have worked on at least two (2) projects with a size and scope similar to [Zorbs Reloaded](#).
 - Must have sound knowledge of game development engines such as Unity.
 - Must have a solid software engineering background, as well as proven experience with working with agile development methodologies.
- Web developer (can be the same person as the Game developer if he/she covers the criteria)
 - Must have at least three (3) years of experience in developing web solutions.
 - Must have sound knowledge of web development with Node JS (Express JS)
 - Must have a proven experience working with MongoDB
 - Must have a solid software engineering background, as well as proven experience with working with agile development methodologies.

- Game designer:
 - Must have at least 5 years of experience in creating visual assets for mobile games.
 - Must have worked on at least 2 projects with similar style and genre as the [Zorbs Reloaded](#).
 - Must have sound knowledge of graphic software like Adobe Illustrator, Adobe Photoshop, 3D Studio Max, Blender, etc.
 - Must have a solid creative/artistic background.

I. Scope of Bid Price and Scheduled Payments

- The contract price is a fixed output-based price regardless of extension of the herein specific duration.
- The cost components that the Proposer must include in the computation of contract price should be purely professional fee.
- The contractor will receive payments each month after delivering the expected documents

Deliverable	Documents	Deadline
1	Invoice, plan for technology absorption (if applicable);	1 week
2	Invoice, report on technology transfer (if applicable);	2 weeks
3	Invoice, hosting and maintenance report (November-December 2020)	8 weeks
4	Invoice, hosting and maintenance report (January-February 2021)	8 weeks (after the previous deliverable)
5	Invoice, hosting and maintenance report (March-April 2021)	8 weeks (after the previous deliverable)
Subsequent requests, subject to needs of the UN	Invoice, hosting and maintenance report (For every two-month period)	8 weeks (after the previous deliverable)

Note: deliverables 1 and 2 will only be expected if the vendor requires the absorption of technology from the current supplier.

J. Recommended Presentation of Proposal

- Company Background
- Portfolio with similar completed projects
- Propose Team member and their one pager resume
- Detail Timeline
- Proposed development technologies
- Proposed development process and methodology
- Price/Quotation in separated envelop
- Specific functions which deem benefit but not part of the required deliver app, should be quote as separated items and is optional

**FORM FOR SUBMITTING SERVICE PROVIDER'S
TECHNICAL PROPOSAL**

**(This Form must be submitted only using the Service Provider's Official
Letterhead/Stationery¹)**

[insert: Location].

[insert: Date]

To: [insert: Name and Address of UNDP focal point]

Dear Sir/Madam:

We, the undersigned, hereby offer to render the following services to UNDP in conformity with the requirements defined in the RFP dated [specify date], and all of its attachments, as well as the provisions of the UNDP General Contract Terms and Conditions :

A. Qualifications of the Service Provider

The Service Provider must describe and explain how and why they are the best entity that can deliver the requirements of UNDP by indicating the following:

- a) Profile – describing the nature of business, field of expertise, licenses, certifications, accreditations;
- b) Business Licenses – Registration Papers, Tax Payment Certification, etc.
- c) Track Record – list of clients for similar services as those required by UNDP, indicating description of contract scope, contract duration, contract value, contact references;
- d) Certificates and Accreditation – including Quality Certificates, Patent Registrations, Environmental Sustainability Certificates, etc.
- e) Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.

B. Proposed Methodology for the Completion of Services

The Service Provider must describe how it will address/deliver the demands of the RFP; providing a detailed description of the essential performance characteristics, reporting conditions and quality assurance mechanisms that will be put in place, while demonstrating that the proposed methodology will be appropriate to the local conditions and context of the work.

¹ Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers – for verification purposes

C. Qualifications of Key Personnel

The Service Provider must provide:

- a) Names and qualifications of the key personnel that will perform the services indicating who is team leader, key personnel, who are supporting, etc.;
- b) CVs demonstrating qualifications must be submitted if required by the RFP; and
- c) Written confirmation from each personnel that they are available for the entire duration of the contract.

[Name and Signature of the Service Provider's
Authorized Person]

[Designation]

[Date]

**FORM FOR SUBMITTING SERVICE PROVIDER'S
FINANCIAL PROPOSAL**

A. Cost Breakdown per Deliverable*

Deliverables	Percentage of Total Price (Weight for payment)	Price (Lump Sum, All Inclusive)
<u>Deliverable 1</u> : plan for absorption of technology through transfer from original developer, if applicable;	20%	
<u>Deliverable 2</u> : report on the absorption of technology through transfer from original developer, if applicable;	20%	
<u>Deliverable 3</u> : monthly hosting and technical maintenance report;	20%	
<u>Deliverable 4</u> : Bi-monthly hosting and technical maintenance report (January-February 2021)	20%	
<u>Deliverable 5</u> : Bi-monthly hosting and technical maintenance report (March-April 2021)	20%	
Total	100%	INR.....

*This shall be the basis of the payment tranches;

NOTE : Deliverables 1 and 2 will only be expected if the vendor requires the absorption of technology from the current supplier.

B. Cost Breakdown by Cost Component[This is only an Example]:

Description of Activity	Remuneration per Unit of Time (in INR)	Total Period of Engagement (in days)	No. of Personnel	Total Amount (INR)
I. Personnel Services*				
1.Team Leader				
2.Team Member1				
3.Team Member2				
4.Team Member3				
5.Any other personnel...				
II. Other related expenses				
1. Travel & accommodation				
2. Communications				
3. Others, if any				
Total				INR.....

* Structure of the team is to be proposed by Proposer in accordance to their understanding of the ToR.

C. Monthly cost for maintenance in the case of contract extensions:

In case UNDP/UNODC extend the contract for additional months, the following monthly maintenance and costs will apply:

- For the calendar year 2021:

Item	Cost
Subtotal per month	INR/USD X,XXX.XX

- For the calendar year 2022:

Item	Cost
Subtotal per month	INR/USD X,XXX.XX

*[Name and Signature of the Service
Provider's Authorized Person]
[Designation][Date]*

GENERAL TERMS AND CONDITIONS FOR CONTRACTS

This Contract is between the United Nations Development Programme, a subsidiary organ of the United Nations established by the General Assembly of the United Nations (hereinafter “UNDP”), on the one hand, and a company or organization indicated in the Face Sheet of this Contract (hereinafter the “Contractor”), on the other hand.

1. LEGAL STATUS OF THE PARTIES: UNDP and the Contractor shall be referred to as a “Party” or, collectively, “Parties” hereunder, and:

1.1 Pursuant, *inter alia*, to the Charter of the United Nations and the Convention on the Privileges and Immunities of the United Nations, the United Nations, including its subsidiary organs, has full juridical personality and enjoys such privileges and immunities as are necessary for the independent fulfillment of its purposes.

1.2 The Contractor shall have the legal status of an independent contractor *vis-à-vis* UNDP, and nothing contained in or relating to the Contract shall be construed as establishing or creating between the Parties the relationship of employer and employee or of principal and agent. The officials, representatives, employees, or subcontractors of each of the Parties shall not be considered in any respect as being the employees or agents of the other Party, and each Party shall be solely responsible for all claims arising out of or relating to its engagement of such persons or entities.

2. OBLIGATIONS OF THE CONTRACTOR:

2.1 The Contractor shall deliver the goods described in the Technical Specifications for Goods (hereinafter the “Goods”) and/or perform and complete the services described in the Terms of Reference and Schedule of Payments (hereinafter the “Services”), with due diligence and efficiency, and in accordance with this Contract. The Contractor shall also provide all technical and administrative support needed in order to ensure the timely and satisfactory delivery of the Goods and/or performance of the Services.

2.2 To the extent that the Contract involves any purchase of the Goods, the Contractor shall provide UNDP with written evidence of the delivery of the Goods. Such evidence of delivery shall, at the minimum, consist of an invoice, a certification of conformity, and other supporting shipment documentation as may otherwise be specified in the Technical Specifications for Goods.

2.3 The Contractor represents and warrants the accuracy of any information or data provided to UNDP for the purpose of entering into this Contract, as well as the quality of the deliverables and reports foreseen under this Contract, in accordance with the highest industry and professional standards.

2.4 All time limits contained in this Contract shall be deemed to be of the essence in respect of the performance of the delivery of the Goods and/or the provision of the

Services.

3. LONG TERM AGREEMENT: If the Contractor is engaged by UNDP on the basis of a long-term agreement ("LTA") as indicated in the Face Sheet of this Contract, the following conditions shall apply:

3.1 UNDP does not warrant that any quantity of Goods and/or Services shall be ordered during the term of the LTA.

3.2 Any UNDP business unit, including, but not limited to, a Headquarters unit, a Country Office or a Regional Centre, as well as any United Nations entity, may benefit from the retainer and order Goods and/or Services from the Contractor hereunder.

3.3 The Contractor shall provide the Services and/or deliver the Goods, as and when requested by UNDP and reflected in a Purchase Order, which shall be subject to the terms and conditions stipulated in this Contract. For the avoidance of doubt, UNDP shall acquire no legal obligations towards the Contractor unless and until a Purchase Order is issued.

3.4 The Goods and/or Services shall be at the Discount Prices annexed hereto. The prices shall remain in effect for a period of three years from the Starting Date stated in the Face Sheet of this Contract.

3.5 In the event of any advantageous technical changes and/or downward pricing of the Goods and/or Services during the term of the retainer, the Contractor shall notify UNDP immediately. UNDP shall consider the impact of any such event and may request an amendment to the retainer.

3.6 The Contractor shall report semi-annually to UNDP on the Goods delivered and/or Services provided, unless otherwise specified in the Contract. Each report should be submitted to the UNDP Contact Person indicated in as indicated in the Face Sheet hereto, as well as to a UNDP business unit that has placed a Purchase Order for the Goods and/or Services during the reporting period.

3.7 The LTA shall remain in force for the maximum period of two years and may be extended by UNDP for one additional year by mutual agreement of the Parties.

4. PRICE AND PAYMENT:

4.1 FIXED PRICE: If Fixed Price is chosen as a payment method pursuant to the Face Sheet of this Contract, in full consideration for the complete and satisfactory delivery of the Goods and/or provision of the Services, UNDP shall pay the Contractor a fixed amount indicated in the Face Sheet of this Contract.

4.1.1 The amount stated in the Face Sheet of this Contract is not subject to any adjustment or revision because of price or currency fluctuations, or the actual costs incurred by the Contractor in the performance of the Contract.

4.1.2 UNDP shall effect payments to the Contractor in the amounts and pursuant to the schedule of payments set forth in the Terms of Reference and Schedule of Payments, upon completion by the Contractor of the corresponding deliverable(s) and upon acceptance by UNDP of the original invoices submitted by the Contractor to the UNDP Contact Person

indicated in the Face Sheet of this Contract, together with whatever supporting documentation that may be required by UNDP:

4.1.3 Invoices shall indicate a deliverable completed and the corresponding amount payable.

4.1.4 Payments effected by UNDP to the Contractor shall be deemed neither to relieve the Contractor of its obligations under this Contract nor as acceptance by UNDP of the Contractor's delivery of the Goods and/or provision of the Services.

4.2 COST REIMBURSEMENT: If Cost Reimbursement is chosen as a payment method pursuant to the Face Sheet of this Contract, in full consideration for the complete and satisfactory delivery of the Goods and/or provision of the Services under this Contract, UNDP shall pay the Contractor an amount not exceeding the total amount stated in the Face Sheet of this Contract.

4.2.1 The said amount is the maximum total amount of reimbursable costs under this Contract. The breakdown of costs contained in the Financial Proposal, referred to in the Face Sheet to this Contract shall specify the maximum amount per each cost category that is reimbursable under this Contract. The Contractor shall specify in its invoices or financial reports (as required by UNDP) the amount of the actual reimbursable costs incurred in the delivery of the Goods and/or the provision of the Services.

4.2.2 The Contractor shall not provide the Services and/or deliver the Goods or equipment, materials and supplies that may result in any costs in excess of the amount stated in the Face Sheet of this Contract, or of the maximum amount per each cost category specified in the breakdown of costs contained in the Financial Proposal, without the prior written agreement of the UNDP Contact Person.

4.2.3 The Contractor shall submit original invoices or financial reports (as required by UNDP) for the Goods delivered in accordance with the Technical Specifications for Goods and/or the Services provided in accordance with the schedule set forth in the Terms of Reference and Schedule of Payments. Such invoices or financial reports shall indicate a deliverable or deliverables completed and the corresponding amount payable. They shall be submitted to the UNDP Contact Person, together with whatever supporting documentation of the actual costs incurred that is required in the Financial Proposal, or may be required by UNDP.

4.2.4 UNDP shall effect payments to the Contractor upon completion by the Contractor of the deliverable(s) indicated in the original invoices or financial reports (as required by UNDP) and upon acceptance of these invoices or financial reports by UNDP. Such payments shall be subject to any specific conditions for reimbursement specified in the breakdown of costs contained in the Financial Proposal.

4.2.5 Payments effected by UNDP to the Contractor shall be deemed neither to relieve the Contractor of its obligations under this Contract nor as acceptance by UNDP of the Contractor's delivery of the Goods and/or performance of the Services.

5. ADVANCE PAYMENT:

5.1 If an advance payment is due to the Contractor pursuant to the Face Sheet of this

Contract, the Contractor shall submit an original invoice for the amount of that advance payment upon signature of this Contract by the Parties.

5.2 If an advance payment representing 20% or more of the total contract value, or amounting to US\$30,000 or more, is to be made by UNDP upon signature of the Contract by the Parties, such payment shall be contingent upon receipt and acceptance by UNDP of a bank guarantee or a certified cheque for the full amount of the advance payment, valid for the duration of the Contract, and in a form acceptable to UNDP.

6. SUBMISSION OF INVOICES AND REPORTS:

6.1 All original invoices, financial reports and any other reports and supporting documentation required under this Contract shall be submitted by mail by the Contractor to UNDP Contact Person. Upon request of the Contractor, and subject to approval by UNDP, invoices and financial reports may be submitted to UNDP by fax or email.

6.2 All reports and invoices shall be submitted by the Contractor to the UNDP Contact Person specified in the Face Sheet of this Contract.

7. TIME AND MANNER OF PAYMENT:

7.1 Invoices shall be paid within thirty (30) days of the date of their acceptance by UNDP. UNDP shall make every effort to accept an original invoice or advise the Contractor of its non-acceptance within a reasonable time from receipt.

7.2 Where the Services are to be provided, in addition to an invoice, the Contractor shall submit to UNDP a report, describing in detail the Services provided under the Contract during the period of time covered in each report.

8. RESPONSIBILITY FOR EMPLOYEES: To the extent that the Contract involves the provision of the Services to UNDP by the Contractor's officials, employees, agents, servants, subcontractors and other representatives (collectively, the Contractor's "personnel"), the following provisions shall apply:

8.1 The Contractor is responsible for and shall assume all risk and liabilities relating to its personnel and property.

8.2 The Contractor shall be responsible for the professional and technical competence of the personnel it assigns to perform work under the Contract and will select reliable and competent individuals who will be able to effectively perform the obligations under the Contract and who, while doing so, will respect the local laws and customs and conform to a high standard of moral and ethical conduct.

8.3 Such Contractor personnel shall be professionally qualified and, if required to work with officials or staff of UNDP, shall be able to do so effectively. The qualifications of any personnel whom the Contractor may assign or may propose to assign to perform any obligations under the Contract shall be substantially the same, or better, as the qualifications of any personnel originally proposed by the Contractor.

8.4 At the option of and in the sole discretion of UNDP:

8.4.1 the qualifications of personnel proposed by the Contractor (*e.g.*, a curriculum vitae)

may be reviewed by UNDP prior to such personnel's performing any obligations under the Contract;

8.4.2 any personnel proposed by the Contractor to perform obligations under the Contract may be interviewed by qualified staff or officials of UNDP prior to such personnel's performing any obligations under the Contract; and,

8.4.3 in cases in which, pursuant to Article 8.4.1 or 8.4.2, above, UNDP has reviewed the qualifications of such Contractor's personnel, UNDP may reasonably refuse to accept any such personnel.

17.2 Requirements specified in the Contract regarding the number or qualifications of the Contractor's personnel may change during the course of performance of the Contract. Any such change shall be made only following written notice of such proposed change and upon written agreement between the Parties regarding such change, subject to the following:

17.2.1 UNDP may, at any time, request, in writing, the withdrawal or replacement of any of the Contractor's personnel, and such request shall not be unreasonably refused by the Contractor.

17.2.2 Any of the Contractor's personnel assigned to perform obligations under the Contract shall not be withdrawn or replaced without the prior written consent of UNDP, which shall not be unreasonably withheld.

17.2.3 The withdrawal or replacement of the Contractor's personnel shall be carried out as quickly as possible and in a manner that will not adversely affect the performance of obligations under the Contract.

17.2.4 All expenses related to the withdrawal or replacement of the Contractor's personnel shall, in all cases, be borne exclusively by the Contractor.

17.2.5 Any request by UNDP for the withdrawal or replacement of the Contractor's personnel shall not be considered to be a termination, in whole or in part, of the Contract, and UNDP shall not bear any liability in respect of such withdrawn or replaced personnel.

17.2.6 If a request for the withdrawal or replacement of the Contractor's personnel is *not* based upon a default by or failure on the part of the Contractor to perform its obligations in accordance with the Contract, the misconduct of the personnel, or the inability of such personnel to reasonably work together with UNDP officials and staff, then the Contractor shall not be liable by reason of any such request for the withdrawal or replacement of the Contractor's personnel for any delay in the performance by the Contractor of its obligations under the Contract that is substantially the result of such personnel's being withdrawn or replaced.

8.6 Nothing in Articles 8.3, 8.4 and 8.5, above, shall be construed to create any obligations on the part of UNDP with respect to the Contractor's personnel assigned to perform work under the Contract, and such personnel shall remain the sole responsibility of the Contractor.

8.7 The Contractor shall be responsible for requiring that all personnel assigned by it to

perform any obligations under the Contract and who may have access to any premises or other property of UNDP shall:

8.7.1 undergo or comply with security screening requirements made known to the Contractor by UNDP, including but not limited to, a review of any criminal history;

8.7.2 when within UNDP premises or on UNDP property, display such identification as may be approved and furnished by UNDP security officials, and that upon the withdrawal or replacement of any such personnel or upon termination or completion of the Contract, such personnel shall immediately return any such identification to UNDP for cancellation.

8.8 Within one working day after learning that any of Contractor's personnel who have access to any UNDP premises have been charged by law enforcement authorities with an offense other than a minor traffic offense, the Contractor shall provide written notice to inform UNDP about the particulars of the charges then known and shall continue to inform UNDP concerning all substantial developments regarding the disposition of such charges.

8.9 All operations of the Contractor, including without limitation, storage of equipment, materials, supplies and parts, within UNDP premises or on UNDP property shall be confined to areas authorized or approved by UNDP. The Contractor's personnel shall not enter or pass through and shall not store or dispose of any of its equipment or materials in any areas within UNDP premises or on UNDP property without appropriate authorization from UNDP.

8.10 The Contractor shall (i) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the Services are being provided; and (ii) assume all risks and liabilities related to the Contractor's security, and the full implementation of the security plan.

8.11 UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this contract. Notwithstanding the foregoing, the Contractor shall remain solely responsible for the security of its personnel and for UNDP's property in its custody as set forth in paragraph 8.10 above.

9. ASSIGNMENT:

9.1 Except as provided in Article 9.2, below, the Contractor may not assign, transfer, pledge or make any other disposition of the Contract, of any part of the Contract, or of any of the rights, claims or obligations under the Contract except with the prior written authorization of UNDP. Any such unauthorized assignment, transfer, pledge or other disposition, or any attempt to do so, shall not be binding on UNDP. Except as permitted with respect to any approved subcontractors, the Contractor shall not delegate any of its obligations under this Contract, except with the prior written consent of UNDP. Any such unauthorized delegation, or attempt to do so, shall not be binding on UNDP.

9.2 The Contractor may assign or otherwise transfer the Contract to the surviving entity resulting from a reorganization of the Contractor's operations, *provided that:*

9.2.1 such reorganization is not the result of any bankruptcy, receivership or other similar proceedings; *and,*

9.2.2 such reorganization arises from a sale, merger, or acquisition of all or substantially all of the Contractor's assets or ownership interests; *and,*

9.2.3 the Contractor promptly notifies UNDP about such assignment or transfer at the earliest opportunity; *and,*

9.2.4 the assignee or transferee agrees in writing to be bound by all of the terms and conditions of the Contract, and such writing is promptly provided to UNDP following the assignment or transfer.

10. SUBCONTRACTING: In the event that the Contractor requires the services of subcontractors to perform any obligations under the Contract, the Contractor shall obtain the prior written approval of UNDP. UNDP shall be entitled, in its sole discretion, to review the qualifications of any subcontractors and to reject any proposed subcontractor that UNDP reasonably considers is not qualified to perform obligations under the Contract. UNDP shall have the right to require any subcontractor's removal from UNDP premises without having to give any justification therefor. Any such rejection or request for removal shall not, in and of itself, entitle the Contractor to claim any delays in the performance, or to assert any excuses for the non-performance, of any of its obligations under the Contract, and the Contractor shall be solely responsible for all services and obligations performed by its subcontractors. The terms of any subcontract shall be subject to, and shall be construed in a manner that is fully in accordance with, all of the terms and conditions of the Contract.

11. PURCHASE OF GOODS: To the extent that the Contract involves any purchase of the Goods, whether in whole or in part, and unless specifically stated otherwise in the Contract, the following conditions shall apply to such purchases under the Contract:

11.1 DELIVERY OF GOODS: The Contractor shall hand over or make available the Goods, and UNDP shall receive the Goods, at the place for the delivery of the Goods and within the time for delivery of the Goods specified in the Contract. The Contractor shall provide to UNDP such shipment documentation (including, without limitation, bills of lading, airway bills, and commercial invoices) as are specified in the Contract or, otherwise, as are customarily utilized in the trade. All manuals, instructions, displays and any other information relevant to the Goods shall be in the English language unless otherwise specified in the Contract. Unless otherwise stated in the Contract (including, but not limited to, in any "INCOTERM" or similar trade term), the entire risk of loss, damage to, or destruction of the Goods shall be borne exclusively by the Contractor until physical delivery of the Goods to UNDP in accordance with the terms of the Contract. Delivery of the Goods shall not be deemed in itself as constituting acceptance of the Goods by UNDP.

11.2 INSPECTION OF THE GOODS: If the Contract provides that the Goods may be

inspected prior to delivery, the Contractor shall notify UNDP when the Goods are ready for pre-delivery inspection. Notwithstanding any pre-delivery inspection, UNDP or its designated inspection agents may also inspect the Goods upon delivery in order to confirm that the Goods conform to applicable specifications or other requirements of the Contract. All reasonable facilities and assistance, including, but not limited to, access to drawings and production data, shall be furnished to UNDP or its designated inspection agents at no charge therefor. Neither the carrying out of any inspections of the Goods nor any failure to undertake any such inspections shall relieve the Contractor of any of its warranties or the performance of any obligations under the Contract.

11.3 PACKAGING OF THE GOODS: The Contractor shall package the Goods for delivery in accordance with the highest standards of export packaging for the type and quantities and modes of transport of the Goods. The Goods shall be packed and marked in a proper manner in accordance with the instructions stipulated in the Contract or, otherwise, as customarily done in the trade, and in accordance with any requirements imposed by applicable law or by the transporters and manufacturers of the Goods. The packing, in particular, shall mark the Contract or Purchase Order number and any other identification information provided by UNDP as well as such other information as is necessary for the correct handling and safe delivery of the Goods. Unless otherwise specified in the Contract, the Contractor shall have no right to any return of the packing materials.

11.4 TRANSPORTATION & FREIGHT: Unless otherwise specified in the Contract (including, but not limited to, in any “INCOTERM” or similar trade term), the Contractor shall be solely liable for making all transport arrangements and for payment of freight and insurance costs for the shipment and delivery of the Goods in accordance with the requirements of the Contract. The Contractor shall ensure that UNDP receives all necessary transport documents in a timely manner so as to enable UNDP to take delivery of the Goods in accordance with the requirements of the Contract.

11.5 WARRANTIES: Unless otherwise specified in the Contract, in addition to and without limiting any other warranties, remedies or rights of UNDP stated in or arising under the Contract, the Contractor warrants and represents that:

11.5.1 The Goods, including all packaging and packing thereof, conform to the technical specifications, are fit for the purposes for which such Goods are ordinarily used and for any purposes expressly made known in writing in the Contract, and shall be of even quality, free from faults and defects in design, material, manufacturer and workmanship;

11.5.2 If the Contractor is not the original manufacturer of the Goods, the Contractor shall provide UNDP with the benefit of all manufacturers’ warranties in addition to any other warranties required to be provided under the Contract;

11.5.3 The Goods are of the quality, quantity and description required by the Contract, including when subjected to conditions prevailing in the place of final destination;

11.5.4 The Goods are free from any right of claim by any third-party, including claims of

infringement of any intellectual property rights, including, but not limited to, patents, copyright and trade secrets;

11.5.5 The Goods are new and unused;

11.5.6 All warranties will remain fully valid following any delivery of the Goods and for a period of not less than one (1) year following acceptance of the Goods by UNDP in accordance with the Contract;

11.5.7 During any period in which the Contractor's warranties are effective, upon notice by UNDP that the Goods do not conform to the requirements of the Contract, the Contractor shall promptly and at its own expense correct such non-conformities or, in case of its inability to do so, replace the defective Goods with Goods of the same or better quality or, at its own cost, remove the defective Goods and fully reimburse UNDP for the purchase price paid for the defective Goods; and,

11.5.8 The Contractor shall remain responsive to the needs of UNDP for any services that may be required in connection with any of the Contractor's warranties under the Contract.

11.6 ACCEPTANCE OF GOODS: Under no circumstances shall UNDP be required to accept any Goods that do not conform to the specifications or requirements of the Contract. UNDP may condition its acceptance of the Goods upon the successful completion of acceptance tests as may be specified in the Contract or otherwise agreed in writing by the Parties. In no case shall UNDP be obligated to accept any Goods unless and until UNDP has had a reasonable opportunity to inspect the Goods following delivery. If the Contract specifies that UNDP shall provide a written acceptance of the Goods, the Goods shall not be deemed accepted unless and until UNDP in fact provides such written acceptance. In no case shall payment by UNDP in and of itself constitute acceptance of the Goods.

11.7 REJECTION OF GOODS: Notwithstanding any other rights of, or remedies available to UNDP under the Contract, in case any of the Goods are defective or otherwise do not conform to the specifications or other requirements of the Contract, UNDP, at its sole option, may reject or refuse to accept the Goods, and within thirty (30) days following receipt of notice from UNDP of such rejection or refusal to accept the Goods, the Contractor shall, in sole option of UNDP:

11.7.1 provide a full refund upon return of the Goods, or a partial refund upon a return of a portion of the Goods, by UNDP; or,

11.7.2 repair the Goods in a manner that would enable the Goods to conform to the specifications or other requirements of the Contract; or,

11.7.3 replace the Goods with Goods of equal or better quality; and,

11.7.4 pay all costs relating to the repair or return of the defective Goods as well as the costs relating to the storage of any such defective Goods and for the delivery of any replacement Goods to UNDP.

11.8 In the event that UNDP elects to return any of the Goods for the reasons specified in

Article 11.7, above, UNDP may procure the Goods from another source. In addition to any other rights or remedies available to UNDP under the Contract, including, but not limited to, the right to terminate the Contract, the Contractor shall be liable for any additional cost beyond the balance of the Contract price resulting from any such procurement, including, *inter alia*, the costs of engaging in such procurement, and UNDP shall be entitled to compensation from the Contractor for any reasonable expenses incurred for preserving and storing the Goods for the Contractor's account.

11.9 TITLE: The Contractor warrants and represents that the Goods delivered under the Contract are unencumbered by any third party's title or other property rights, including, but not limited to, any liens or security interests. Unless otherwise expressly provided in the Contract, title in and to the Goods shall pass from the Contractor to UNDP upon delivery of the Goods and their acceptance by UNDP in accordance with the requirements of the Contract.

11.10 EXPORT LICENSING: The Contractor shall be responsible for obtaining any export license required with respect to the Goods, products, or technologies, including software, sold, delivered, licensed or otherwise provided to UNDP under the Contract. The Contractor shall procure any such export license in an expeditious manner. Subject to and without any waiver of the privileges and immunities of UNDP, UNDP shall lend the Contractor all reasonable assistance required for obtaining any such export license. Should any Governmental entity refuse, delay or hinder the Contractor's ability to obtain any such export license, the Contractor shall promptly consult with UNDP to enable UNDP to take appropriate measures to resolve the matter.

12. INDEMNIFICATION:

12.1 The Contractor shall indemnify, defend, and hold and save harmless, UNDP, and its officials, agents and employees, from and against all suits, proceedings, claims, demands, losses and liability of any kind or nature brought by any third party against UNDP, including, but not limited to, all litigation costs and expenses, attorney's fees, settlement payments and damages, based on, arising from, or relating to:

12.1.1 allegations or claims that the possession of or use by UNDP of any patented device, any copyrighted material, or any other goods, property or services provided or licensed to UNDP under the terms of the Contract, in whole or in part, separately or in a combination contemplated by the Contractor's published specifications therefor, or otherwise specifically approved by the Contractor, constitutes an infringement of any patent, copyright, trademark, or other intellectual property right of any third party; *or*,

12.1.2 any acts or omissions of the Contractor, or of any subcontractor or anyone directly or indirectly employed by them in the performance of the Contract, which give rise to legal liability to anyone not a party to the Contract, including, without limitation, claims and liability in the nature of a claim for workers' compensation.

12.2 The indemnity set forth in Article 12.1.1, above, shall not apply to:

12.2.1 A claim of infringement resulting from the Contractor's compliance with specific

written instructions by UNDP directing a change in the specifications for the goods, property, materials, equipment or supplies to be or used, or directing a manner of performance of the Contract or requiring the use of specifications not normally used by the Contractor; *or*

12.2.2 A claim of infringement resulting from additions to or changes in any goods, property, materials equipment, supplies or any components thereof furnished under the Contract if UNDP or another party acting under the direction of UNDP made such changes.

12.3 In addition to the indemnity obligations set forth in this Article 12, the Contractor shall be obligated, at its sole expense, to defend UNDP and its officials, agents and employees, pursuant to this Article 12, regardless of whether the suits, proceedings, claims and demands in question actually give rise to or otherwise result in any loss or liability.

12.4 UNDP shall advise the Contractor about any such suits, proceedings, claims, demands, losses or liability within a reasonable period of time after having received actual notice thereof. The Contractor shall have sole control of the defense of any such suit, proceeding, claim or demand and of all negotiations in connection with the settlement or compromise thereof, except with respect to the assertion or defense of the privileges and immunities of UNDP or any matter relating thereto, for which only UNDP itself is authorized to assert and maintain. UNDP shall have the right, at its own expense, to be represented in any such suit, proceeding, claim or demand by independent counsel of its own choosing.

12.5 In the event the use by UNDP of any Goods, property or Services provided or licensed to UNDP by the Contractor, in whole or in part, in any suit or proceeding, is for any reason enjoined, temporarily or permanently, or is found to infringe any patent, copyright, trademark or other intellectual property right, or in the event of a settlement, is enjoined, limited or otherwise interfered with, then the Contractor, at its sole cost and expense, shall, promptly, either:

12.5.1 procure for UNDP the unrestricted right to continue using such Goods or Services provided to UNDP;

12.5.2 replace or modify the Goods and/or or Services provided to UNDP, or part thereof, with the equivalent or better Goods and/or Services, or part thereof, that is non-infringing; *or*,

12.5.3 refund to UNDP the full price paid by UNDP for the right to have or use such Goods, property or Services, or part thereof.

13. INSURANCE AND LIABILITY:

13.1 The Contractor shall pay UNDP promptly for all loss, destruction, or damage to the property of UNDP caused by the Contractor's personnel or by any of its subcontractors or anyone else directly or indirectly employed by the Contractor or any of its subcontractors in the performance of the Contract.

13.2 Unless otherwise provided in the Contract, prior to commencement of performance of any other obligations under the Contract, and subject to any limits set forth in the Contract, the Contractor shall take out and shall maintain for the entire term of the Contract, for any extension thereof, and for a period following any termination of the Contract reasonably adequate to deal with losses:

13.2.1 insurance against all risks in respect of its property and any equipment used for the performance of the Contract;

13.2.2 workers' compensation insurance, or its equivalent, or employer's liability insurance, or its equivalent, with respect to the Contractor's personnel sufficient to cover all claims for injury, death and disability, or any other benefits required to be paid by law, in connection with the performance of the Contract;

13.2.3 liability insurance in an adequate amount to cover all claims, including, but not limited to, claims for death and bodily injury, products and completed operations liability, loss of or damage to property, and personal and advertising injury, arising from or in connection with the Contractor's performance under the Contract, including, but not limited to, liability arising out of or in connection with the acts or omissions of the Contractor, its personnel, agents, or invitees, or the use, during the performance of the Contract, of any vehicles, boats, airplanes or other transportation vehicles and equipment, whether or not owned by the Contractor; *and*,

13.2.4 such other insurance as may be agreed upon in writing between UNDP and the Contractor.

13.3 The Contractor's liability policies shall also cover subcontractors and all defense costs and shall contain a standard "cross liability" clause.

13.4 The Contractor acknowledges and agrees that UNDP accepts no responsibility for providing life, health, accident, travel or any other insurance coverage which may be necessary or desirable in respect of any personnel performing services for the Contractor in connection with the Contract.

13.5 Except for the workers' compensation insurance or any self-insurance program maintained by the Contractor and approved by UNDP, in its sole discretion, for purposes of fulfilling the Contractor's requirements for providing insurance under the Contract, the insurance policies required under the Contract shall:

13.5.1 name UNDP as an additional insured under the liability policies, including, if required, as a separate endorsement under the policy;

13.5.2 include a waiver of subrogation of the Contractor's insurance carrier's rights against UNDP;

13.5.3 provide that UNDP shall receive written notice from the Contractor's insurance carrier not less than thirty (30) days prior to any cancellation or material change of coverage; *and*,

13.5.4 include a provision for response on a primary and non-contributing basis with respect to any other insurance that may be available to UNDP.

13.6 The Contractor shall be responsible to fund all amounts within any policy deductible or retention.

13.7 Except for any self-insurance program maintained by the Contractor and approved by UNDP for purposes of fulfilling the Contractor's requirements for maintaining insurance under the Contract, the Contractor shall maintain the insurance taken out under the Contract with reputable insurers that are in good financial standing and that are acceptable to UNDP. Prior to the commencement of any obligations under the Contract, the Contractor shall provide UNDP with evidence, in the form of certificate of insurance or such other form as UNDP may reasonably require, that demonstrates that the Contractor has taken out insurance in accordance with the requirements of the Contract. UNDP reserves the right, upon written notice to the Contractor, to obtain copies of any insurance policies or insurance program descriptions required to be maintained by the Contractor under the Contract. Notwithstanding the provisions of Article 13.5.3, above, the Contractor shall promptly notify UNDP concerning any cancellation or material change of insurance coverage required under the Contract.

13.8 The Contractor acknowledges and agrees that neither the requirement for taking out and maintaining insurance as set forth in the Contract nor the amount of any such insurance, including, but not limited to, any deductible or retention relating thereto, shall in any way be construed as limiting the Contractor's liability arising under or relating to the Contract.

14. ENCUMBRANCES AND LIENS: The Contractor shall not cause or permit any lien, attachment or other encumbrance by any person to be placed on file or to remain on file in any public office or on file with UNDP against any monies due to the Contractor or that may become due for any work done or against any goods supplied or materials furnished under the Contract, or by reason of any other claim or demand against the Contractor or UNDP.

15. EQUIPMENT FURNISHED BY UNDP TO THE CONTRACTOR: Title to any equipment and supplies that may be furnished by UNDP to the Contractor for the performance of any obligations under the Contract shall rest with UNDP, and any such equipment shall be returned to UNDP at the conclusion of the Contract or when no longer needed by the Contractor. Such equipment, when returned to UNDP, shall be in the same condition as when delivered to the Contractor, subject to normal wear and tear, and the Contractor shall be liable to compensate UNDP for the actual costs of any loss of, damage to, or degradation of the equipment that is beyond normal wear and tear.

16. COPYRIGHT, PATENTS AND OTHER PROPRIETARY RIGHTS:

16.1 Except as is otherwise expressly provided in writing in the Contract, UNDP shall be entitled to all intellectual property and other proprietary rights including, but not limited to, patents, copyrights, and trademarks, with regard to products, processes, inventions, ideas, know-how, or documents and other materials which the Contractor has developed for UNDP under the Contract and which bear a direct relation to or are

produced or prepared or collected in consequence of, or during the course of, the performance of the Contract. The Contractor acknowledges and agrees that such products, documents and other materials constitute works made for hire for UNDP.

16.2 To the extent that any such intellectual property or other proprietary rights consist of any intellectual property or other proprietary rights of the Contractor: (i) that pre-existed the performance by the Contractor of its obligations under the Contract, or (ii) that the Contractor may develop or acquire, or may have developed or acquired, independently of the performance of its obligations under the Contract, UNDP does not and shall not claim any ownership interest thereto, and the Contractor grants to UNDP a perpetual license to use such intellectual property or other proprietary right solely for the purposes of and in accordance with the requirements of the Contract.

16.3 At the request of UNDP, the Contractor shall take all necessary steps, execute all necessary documents and generally assist in securing such proprietary rights and transferring or licensing them to UNDP in compliance with the requirements of the applicable law and of the Contract.

16.4 Subject to the foregoing provisions, all maps, drawings, photographs, mosaics, plans, reports, estimates, recommendations, documents, and all other data compiled by or received by the Contractor under the Contract shall be the property of UNDP, shall be made available for use or inspection by UNDP at reasonable times and in reasonable places, shall be treated as confidential, and shall be delivered only to UNDP authorized officials on completion of work under the Contract.

17. PUBLICITY, AND USE OF THE NAME, EMBLEM OR OFFICIAL SEAL OF UNDP OR THE UNITED NATIONS: The Contractor shall not advertise or otherwise make public for purposes of commercial advantage or goodwill that it has a contractual relationship with UNDP, nor shall the Contractor, in any manner whatsoever use the name, emblem or official seal of UNDP or the United Nations, or any abbreviation of the name of UNDP or the United Nations in connection with its business or otherwise without the written permission of UNDP.

18. CONFIDENTIAL NATURE OF DOCUMENTS AND INFORMATION: Information and data that is considered proprietary by either Party or that is delivered or disclosed by one Party ("Discloser") to the other Party ("Recipient") during the course of performance of the Contract, and that is designated as confidential ("Information"), shall be held in confidence by that Party and shall be handled as follows:

18.1 The Recipient shall:

18.1.1 use the same care and discretion to avoid disclosure, publication or dissemination of the Discloser's Information as it uses with its own similar Information that it does not wish to disclose, publish or disseminate; *and*,

18.1.2 use the Discloser's Information solely for the purpose for which it was disclosed.

18.2 Provided that the Recipient has a written agreement with the following persons or entities requiring them to treat the Information confidential in accordance with the

Contract and this Article 18, the Recipient may disclose Information to:

18.2.1 any other party with the Discloser's prior written consent; *and*,

18.2.2 the Recipient's employees, officials, representatives and agents who have a need to know such Information for purposes of performing obligations under the Contract, and employees officials, representatives and agents of any legal entity that it controls, controls it, or with which it is under common control, who have a need to know such Information for purposes of performing obligations under the Contract, *provided that*, for these purposes a controlled legal entity means:

18.2.2.1 a corporate entity in which the Party owns or otherwise controls, whether directly or indirectly, over fifty percent (50%) of voting shares thereof; *or*,

18.2.2.2 any entity over which the Party exercises effective managerial control; *or*,

18.2.2.3 for the United Nations, a principal or subsidiary organ of the United Nations established in accordance with the Charter of the United Nations.

18.3 The Contractor may disclose Information *to the extent* required by law, *provided that*, subject to and without any waiver of the privileges and immunities of the United Nations, the Contractor will give UNDP sufficient prior notice of *a* request for the disclosure of Information in order to allow UNDP to have a reasonable opportunity to take protective measures or such other action as may be appropriate before any such disclosure is made.

18.4 UNDP may disclose Information to the extent as required pursuant to the Charter of the United Nations, or pursuant to resolutions or regulations of the General Assembly or rules promulgated thereunder.

18.5 The Recipient shall not be precluded from disclosing Information that is obtained by the Recipient from a third party without restriction, is disclosed by the Discloser to a third party without any obligation of confidentiality, is previously known by the Recipient, or at any time is developed by the Recipient completely independently of any disclosures hereunder.

18.6 These obligations and restrictions of confidentiality shall be effective during the term of the Contract, including any extension thereof, and, unless otherwise provided in the Contract, shall remain effective following any termination of the Contract.

19. FORCE MAJEURE; OTHER CHANGES IN CONDITIONS:

19.1 In the event of and as soon as possible after the occurrence of any cause constituting *force majeure*, the affected Party shall give notice and full particulars in writing to the other Party, of such occurrence or cause if the affected Party is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under the Contract. The affected Party shall also notify the other Party of any other changes in condition or the occurrence of any event which interferes or threatens to interfere with its performance of the Contract. Not more than fifteen (15) days following the provision of such notice of *force majeure* or other changes in condition or occurrence, the affected Party shall also submit a statement to the other Party of estimated

expenditures that will likely be incurred for the duration of the change in condition or the event of *force majeure*. On receipt of the notice or notices required hereunder, the Party not affected by the occurrence of a cause constituting *force majeure* shall take such action as it reasonably considers to be appropriate or necessary in the circumstances, including the granting to the affected Party of a reasonable extension of time in which to perform any obligations under the Contract.

19.2 If the Contractor is rendered unable, wholly or in part, by reason of *force majeure* to perform its obligations and meet its responsibilities under the Contract, UNDP shall have the right to suspend or terminate the Contract on the same terms and conditions as are provided for in Article 20, "Termination," except that the period of notice shall be seven (7) days instead of thirty (30) days. In any case, UNDP shall be entitled to consider the Contractor permanently unable to perform its obligations under the Contract in case the Contractor is unable to perform its obligations, wholly or in part, by reason of *force majeure* for any period in excess of ninety (90) days.

19.3 *Force majeure* as used herein means any unforeseeable and irresistible act of nature, any act of war (whether declared or not), invasion, revolution, insurrection, terrorism, or any other acts of a similar nature or force, *provided that* such acts arise from causes beyond the control and without the fault or negligence of the Contractor. The Contractor acknowledges and agrees that, with respect to any obligations under the Contract that the Contractor must perform in areas in which UNDP is engaged in, preparing to engage in, or disengaging from any peacekeeping, humanitarian or similar operations, any delays or failure to perform such obligations arising from or relating to harsh conditions within such areas, or to any incidents of civil unrest occurring in such areas, shall not, in and of itself, constitute *force majeure* under the Contract.

20. TERMINATION:

20.1 Either Party may terminate the Contract for cause, in whole or in part, upon thirty (30) day's notice, in writing, to the other Party. The initiation of conciliation or arbitral proceedings in accordance with Article 23 "Settlement of Disputes," below, shall not be deemed to be a "cause" for or otherwise to be in itself a termination of the Contract.

20.2 UNDP may terminate the Contract at any time by providing written notice to the Contractor in any case in which the mandate of UNDP applicable to the performance of the Contract or the funding of UNDP applicable to the Contract is curtailed or terminated, whether in whole or in part. In addition, unless otherwise provided by the Contract, upon sixty (60) day's advance written notice to the Contractor, UNDP may terminate the Contract without having to provide any justification therefor.

20.3 In the event of any termination of the Contract, upon receipt of notice of termination that has been issued by UNDP, the Contractor shall, except as may be directed by UNDP in the notice of termination or otherwise in writing:

20.3.1 take immediate steps to bring the performance of any obligations under the Contract to a close in a prompt and orderly manner, and in doing so, reduce expenses to

a minimum;

20.3.2 refrain from undertaking any further or additional commitments under the Contract as of and following the date of receipt of such notice;

20.3.3 place no further subcontracts or orders for materials, services, or facilities, except as UNDP and the Contractor agree in writing are necessary to complete any portion of the Contract that is not terminated;

20.3.4 terminate all subcontracts or orders to the extent they relate to the portion of the Contract terminated;

20.3.5 transfer title and deliver to UNDP the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the portion of the Contract terminated;

20.3.6 deliver all completed or partially completed plans, drawings, information, and other property that, if the Contract had been completed, would be required to be furnished to UNDP thereunder;

20.3.7 complete performance of the work not terminated; *and*,

20.3.8 take any other action that may be necessary, or that UNDP may direct in writing, for the minimization of losses and for the protection and preservation of any property, whether tangible or intangible, related to the Contract that is in the possession of the Contractor and in which UNDP has or may be reasonably expected to acquire an interest.

20.4 In the event of any termination of the Contract, UNDP shall be entitled to obtain reasonable written accountings from the Contractor concerning all obligations performed or pending in accordance with the Contract. In addition, UNDP shall not be liable to pay the Contractor except for those Goods satisfactorily delivered and/or Services satisfactorily provided to UNDP in accordance with the requirements of the Contract, but only if such Goods or Services were ordered, requested or otherwise provided prior to the Contractor's receipt of notice of termination from UNDP or prior to the Contractor's tendering of notice of termination to UNDP.

20.5 UNDP may, without prejudice to any other right or remedy available to it, terminate the Contract forthwith in the event that:

20.5.1 the Contractor is adjudged bankrupt, or is liquidated, or becomes insolvent, or applies for a moratorium or stay on any payment or repayment obligations, or applies to be declared insolvent;

20.5.2 the Contractor is granted a moratorium or a stay, or is declared insolvent;

20.5.3 the Contractor makes an assignment for the benefit of one or more of its creditors;

20.5.4 a Receiver is appointed on account of the insolvency of the Contractor;

20.5.5 the Contractor offers a settlement in lieu of bankruptcy or receivership; *or*,

20.5.6 UNDP reasonably determines that the Contractor has become subject to a materially adverse change in its financial condition that threatens to substantially affect the ability of the Contractor to perform any of its obligations under the Contract.

20.6 Except as prohibited by law, the Contractor shall be bound to compensate UNDP

for all damages and costs, including, but not limited to, all costs incurred by UNDP in any legal or non- legal proceedings, as a result of any of the events specified in Article 20.5, above, and resulting from or relating to a termination of the Contract, even if the Contractor is adjudged bankrupt, or is granted a moratorium or stay or is declared insolvent. The Contractor shall immediately inform UNDP of the occurrence of any of the events specified in Article 20.5, above, and shall provide UNDP with any information pertinent thereto.

20.7 The provisions of this Article 20 are without prejudice to any other rights or remedies of UNDP under the Contract or otherwise.

21. NON-WAIVER OF RIGHTS: The failure by either Party to exercise any rights available to it, whether under the Contract or otherwise, shall not be deemed for any purposes to constitute a waiver by the other Party of any such right or any remedy associated therewith, and shall not relieve the Parties of any of their obligations under the Contract.

22. NON-EXCLUSIVITY: Unless otherwise specified in the Contract, UNDP shall have no obligation to purchase any minimum quantities of goods or services from the Contractor, and UNDP shall have no limitation on its right to obtain goods or services of the same kind, quality and quantity described in the Contract, from any other source at any time.

23. SETTLEMENT OF DISPUTES:

23.1 AMICABLE SETTLEMENT: The Parties shall use their best efforts to amicably settle any dispute, controversy, or claim arising out of the Contract or the breach, termination, or invalidity thereof. Where the Parties wish to seek such an amicable settlement through conciliation, the conciliation shall take place in accordance with the Conciliation Rules then obtaining of the United Nations Commission on International Trade Law ("UNCITRAL"), or according to such other procedure as may be agreed between the Parties in writing.

23.2 ARBITRATION: Any dispute, controversy, or claim between the Parties arising out of the Contract or the breach, termination, or invalidity thereof, unless settled amicably under Article 23.1, above, within sixty (60) days after receipt by one Party of the other Party's written request for such amicable settlement, shall be referred by either Party to arbitration in accordance with the UNCITRAL Arbitration Rules then obtaining. The decisions of the arbitral tribunal shall be based on general principles of international commercial law. The arbitral tribunal shall be empowered to order the return or destruction of goods or any property, whether tangible or intangible, or of any confidential information provided under the Contract, order the termination of the Contract, or order that any other protective measures be taken with respect to the goods, services or any other property, whether tangible or intangible, or of any confidential information provided under the Contract, as appropriate, all in accordance with the authority of the arbitral tribunal pursuant to Article 26 ("Interim measures") and Article 34 ("Form and effect of the award") of the UNCITRAL Arbitration Rules. The arbitral

tribunal shall have no authority to award punitive damages. In addition, unless otherwise expressly provided in the Contract, the arbitral tribunal shall have no authority to award interest in excess of the London Inter-Bank Offered Rate ("LIBOR") then prevailing, and any such interest shall be simple interest only. The Parties shall be bound by any arbitration award rendered as a result of such arbitration as the final adjudication of any such dispute, controversy, or claim.

24. PRIVILEGES AND IMMUNITIES: Nothing in or relating to the Contract shall be deemed a waiver, express or implied, of any of the privileges and immunities of the United Nations, including its subsidiary organs.

25. TAX EXEMPTION:

25.1 Article II, Section 7, of the Convention on the Privileges and Immunities of the United Nations provides, *inter alia*, that the United Nations, including its subsidiary organs, is exempt from all direct taxes, except charges for public utility services, and is exempt from customs restrictions, duties, and charges of a similar nature in respect of articles imported or exported for its official use. In the event any governmental authority refuses to recognize the exemptions of UNDP from such taxes, restrictions, duties, or charges, the Contractor shall immediately consult with UNDP to determine a mutually acceptable procedure.

25.2 The Contractor authorizes UNDP to deduct from the Contractor's invoices any amount representing such taxes, duties or charges, unless the Contractor has consulted with UNDP before the payment thereof and UNDP has, in each instance, specifically authorized the Contractor to pay such taxes, duties, or charges under written protest. In that event, the Contractor shall provide UNDP with written evidence that payment of such taxes, duties or charges has been made and appropriately authorized, and UNDP shall reimburse the Contractor for any such taxes, duties, or charges so authorized by UNDP and paid by the Contractor under written protest.

26. MODIFICATIONS:

26.1 No modification or change in this Contract shall be valid and enforceable against UNDP unless executed in writing by the duly authorized representatives of the Parties.

26.2 If the Contract shall be extended for additional periods in accordance with the terms and conditions of the Contract, the terms and conditions applicable to any such extended term of the Contract shall be the same terms and conditions as set forth in the Contract, unless the Parties shall have agreed otherwise pursuant to a valid amendment concluded in accordance with Article 26.1, above.

26.3 The terms or conditions of any supplemental undertakings, licenses, or other forms of agreement concerning any Goods or Services provided under the Contract shall not be valid and enforceable against UNDP nor in any way shall constitute an agreement by UNDP thereto unless any such undertakings, licenses or other forms are the subject of a valid amendment concluded in accordance with Article 26.1, above.

27. AUDITS AND INVESTIGATIONS:

27.1 Each invoice paid by UNDP shall be subject to a post-payment audit by auditors, whether internal or external, of UNDP or by other authorized and qualified agents of UNDP at any time during the term of the Contract and for a period of three (3) years following the expiration or prior termination of the Contract.

27.2 UNDP may conduct investigations relating to any aspect of the Contract or the award thereof, the obligations performed under the Contract, and the operations of the Contractor generally relating to performance of the Contract at any time during the term of the Contract and for a period of three (3) years following the expiration or prior termination of the Contract.

27.3 The Contractor shall provide its full and timely cooperation with any such inspections, post- payment audits or investigations. Such cooperation shall include, but shall not be limited to, the Contractor's obligation to make available its personnel and any relevant documentation for such purposes at reasonable times and on reasonable conditions and to grant to UNDP access to the Contractor's premises at reasonable times and on reasonable conditions in connection with such access to the Contractor's personnel and relevant documentation. The Contractor shall require its agents, including, but not limited to, the Contractor's attorneys, accountants or other advisers, to reasonably cooperate with any inspections, post-payment audits or investigations carried out by UNDP hereunder.

27.4 UNDP shall be entitled to a refund from the Contractor for any amounts shown by such audits or investigations to have been paid by UNDP other than in accordance with the terms and conditions of the Contract. The Contractor also agrees that, where applicable, donors to UNDP whose funding is the source of, in whole or in part, the funding for the procurement of Goods and/or Services which are the subject of this Contract, shall have direct recourse to the Contractor for the recovery of any funds determined by UNDP to have been used in violation of or inconsistent with this Contract.

28. LIMITATION ON ACTIONS:

28.1 Except with respect to any indemnification obligations in Article 12, above, or as are otherwise set forth in the Contract, any arbitral proceedings in accordance with Article 23.2, above, arising out of the Contract must be commenced within three years after the cause of action has accrued.

28.2 The Parties further acknowledge and agree that, for these purposes, a cause of action shall accrue when the breach actually occurs, or, in the case of latent defects, when the injured Party knew or should have known all of the essential elements of the cause of action, or in the case of a breach of warranty, when tender of delivery is made, except that, if a warranty extends to future performance of the goods or any process or system and the discovery of the breach consequently must await the time when such goods or other process or system is ready to perform in accordance with the requirements of the Contract, the cause of action accrues when such time of future performance actually begins.

29. ESSENTIAL TERMS: The Contractor acknowledges and agrees that each of the provisions in Articles 30 to 36 hereof constitutes an essential term of the Contract and that any breach of any of these provisions shall entitle UNDP to terminate the Contract or any other contract with UNDP immediately upon notice to the Contractor, without any liability for termination charges or any other liability of any kind. In addition, nothing herein shall limit the right of UNDP to refer any alleged breach of the said essential terms to the relevant national authorities for appropriate legal action.

30. SOURCE OF INSTRUCTIONS: The Contractor shall neither seek nor accept instructions from any authority external to UNDP in connection with the performance of its obligations under the Contract. Should any authority external to UNDP seek to impose any instructions concerning or restrictions on the Contractor's performance under the Contract, the Contractor shall promptly notify UNDP and provide all reasonable assistance required by UNDP. The Contractor shall not take any action in respect of the performance of its obligations under the Contract that may adversely affect the interests of UNDP or the United Nations, and the Contractor shall perform its obligations under the Contract with the fullest regard to the interests of UNDP.

31. STANDARDS OF CONDUCT: The Contractor warrants that it has not and shall not offer any direct or indirect benefit arising from or related to the performance of the Contract, or the award thereof, to any representative, official, employee or other agent of UNDP. The Contractor shall comply with all laws, ordinances, rules and regulations bearing upon the performance of its obligations under the Contract. In addition, in the performance of the Contract, the Contractor shall comply with the Standards of Conduct set forth in the Secretary General's Bulletin ST/SGB/2002/9 of 18 June 2002, entitled "Regulations Governing the Status, Basic Rights and Duties of Officials other than Secretariat Officials, and Expert on Mission" and ST/SGB/2006/15 of 26 December 2006 on "Post-employment restrictions", and shall also comply with and be subject to the requirements of the following documents then in force at the time of signature of the Contract:

31.1 The UN Supplier Code of Conduct;

31.2 UNDP Policy on Fraud and other Corrupt Practices ("UNDP Anti-fraud Policy");

31.3 UNDP Office of Audit and Investigations (OAI) Investigation Guidelines;

31.4 UNDP Social and Environmental Standards (SES), including the related Accountability Mechanism;

31.5 UNDP Vendor Sanctions Policy; and

31.6 All security directives issued by UNDP.

The Contractor acknowledges and agrees that it has read and is familiar with the requirements of the foregoing documents which are available online at www.undp.org or at <http://www.undp.org/content/undp/en/home/operations/procurement/business/>. In making such acknowledgement, the Contractor represents and warrants that it is in compliance with the requirements of the foregoing, and will remain in compliance throughout the term of this Contract.

32. OBSERVANCE OF THE LAW: The Contractor shall comply with all laws, ordinances, rules, and regulations bearing upon the performance of its obligations under the Contract. In addition, the Contractor shall maintain compliance with all obligations relating to its registration as a qualified vendor of goods or services to UNDP, as such obligations are set forth in UNDP vendor registration procedures.

33. CHILD LABOR: The Contractor represents and warrants that neither it, its parent entities (if any), nor any of the Contractor's subsidiary or affiliated entities (if any) is engaged in any practice inconsistent with the rights set forth in the Convention on the Rights of the Child, including Article 32 thereof, which, *inter alia*, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.

34. MINES: The Contractor represents and warrants that neither it, its parent entities (if any), nor any of the Contractor's subsidiaries or affiliated entities (if any) is engaged in the sale or manufacture of anti-personnel mines or components utilized in the manufacture of anti-personnel mines.

35. SEXUAL EXPLOITATION:

35.1 In the performance of the Contract, the Contractor shall comply with the Standards of Conduct set forth in the Secretary-General's bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse." In particular, the Contractor shall not engage in any conduct that would constitute sexual exploitation or sexual abuse, as defined in that bulletin.

35.2 The Contractor shall take all appropriate measures to prevent sexual exploitation or abuse of anyone by its employees or any other persons engaged and controlled by the Contractor to perform any services under the Contract. For these purposes, sexual activity with any person less than eighteen years of age, regardless of any laws relating to consent, shall constitute the sexual exploitation and abuse of such person. In addition, the Contractor shall refrain from, and shall take all reasonable and appropriate measures to prohibit its employees or other persons engaged and controlled by it from exchanging any money, goods, services, or other things of value, for sexual favors or activities, or from engaging any sexual activities that are exploitive or degrading to any person.

35.3 UNDP shall not apply the foregoing standard relating to age in any case in which the Contractor's personnel or any other person who may be engaged by the Contractor to perform any services under the Contract is married to the person less than the age of eighteen years with whom sexual activity has occurred and in which such marriage is recognized as valid under the laws of the country of citizenship of such Contractor's personnel or such other person who may be engaged by the Contractor to perform any services under the Contract.

36. ANTI-TERRORISM: The Contractor agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received under the Contract is used to provide support

to individuals or entities associated with terrorism and that recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to Resolution 1267 (1999). The list can be accessed via https://www.un.org/sc/suborg/en/sanctions/1267/aq_sanctions_list. This provision must be included in all sub-contracts or sub-agreements entered into under the Contract.

Technical details

The game requires the maintenance of the software pieces: the mobile game that runs on the mobile devices and in a web browser; the backend/admin console that allows for managing some game elements and content of the game.

The technological stack on which the game itself has been developed is as follows:

- Unity 2018.4+

The technical stack on which the admin console is developed and runs is as follow:

- Node v10.16.0
- Npm v6.0.0
- MongoDB
- Apache 2 as a proxy server
- Redis v5.0.0

The hosting used for both the data storage for the game and the console is AWS.

Software development and security requirements

All of the software products developed for the United Nations by external service providers, shall comply with the some minimum requirements set by the United Nations Office of Information and Communication Technologies. Those include security requirements, access control procedures and software development procedures. For more information, please refer to the attached documents:

1. Access control for the United Nations Secretariat systems ICT technical procedure [Annex 7 a]
2. Software development technical procedures [Annex 7 b]
3. Minimum security requirements for public websites of the United Nations ICT Technical Procedure [Annex 7 c]

Annex 7a Access control for United Nations Secretariat

Access Control for the United Nations Secretariat systems ICT Technical Procedure

Ref: SEC.02.PROC

Revision History

Serial Number	Release Description	Release Number	Release Date	Author(s)
1	New Document	1.0	15 Nov 2013	Endorsed by the ICT Policy Committee
2	Revised and endorsed	2.0	15 Aug 2018	ICT Policy Committee

Approved By

Date:



August 30, 2018

Atefeh Riazi, ASG/CITO

Access Control for the United Nations Secretariat systems ICT Technical Procedure

1 Purpose

- 1.1 This document outlines the access control policy and related procedures for the United Nations Secretariat and defines the minimum common requirements of access control for all ICT systems. It shall be read in conjunction with the Information Security Policy Directive for the United Nations Secretariat and [ST/SGB/2004/15](#) ("Use of information and communication technology resources and data").
- 1.2 The purpose of this document is to provide guidelines and to specify security controls which is in accordance to the ISO/IEC 27001:2013 standard for information systems in use at and supporting the United Nations Secretariat as part of the Information Security programme of the Organization.

2 Definitions

- 2.1 The following definitions shall apply for the purposes of the present procedure:
 - a) *Authorized User*: any staff member (internal user) who is authorized to use information and communication technology (ICT) resources¹ or external information provider / consumer who has been authorized to access selected ICT resources, in line with established procedures;
 - b) *Information Owner or Office of record*: The information owner or office of record is the office or administrative unit that has been designated for the maintenance, preservation and disposition of record (official) copies;
 - c) *Record*: any data or information, regardless of form or medium, maintained by the United Nations as evidence of a transaction; A record can be represented in any medium, for example paper, reports, completed forms, data on hard drives, servers, disks, tapes and microfilm;
 - d) *Security levels*: The Information Security Policy Directive stipulates the use of "a tiered system of policies and procedures, based primarily on the sensitivity of information as defined in [ST/SGB/2007/6](#) (Information sensitivity, classification and handling)". Security levels are defined as Level 1, Level 2 and Level 3, based on the requirements for "confidentiality" and mode of access ("exposure"). These levels do not address requirements for availability (high availability/failover etc.) or assurance (advanced/basic). Security levels are defined as follows:
 - Level 1: Public information regardless of its exposure; unclassified internal information that is exposed only internally
 - Level 2: Confidential information that is exposed only internally; unclassified information that is directly accessible from public networks
 - Level 3: Confidential information that is directly accessible from public networks; strictly confidential information regardless of its exposure. In addition to the controls of level 3, systems that provide access to "strictly confidential" content from public networks need to ensure that all accounts are protected with approved multi-factor authentication (MFA) solutions when accessing that system.

¹ The Commentary of ST/SGB/2004/15 provides further clarification of this term regarding individuals affiliated with the Organization who are not staff members, but who are authorized to use ICT resources.

<i>Confidentiality Exposure</i>	<i>Public information</i>	<i>Internal information (see ST/SGB/2007/6)</i>		
		<i>unclassified</i>	<i>confidential</i>	<i>strictly conf.</i>
<i>Internal</i>	level 1	level 1	level 2	level 3
<i>External</i>	level 1	level 2	level 3	level 3 using MFA

3 User Account Management

- 3.1 All requests for new user accounts shall be authorized by the Substantive Office or Human Resource Management Service. User registration forms shall be reviewed for completeness and appropriate authorizations prior to granting access to ICT resources. All users shall be made aware of [ST/SGB/2004/15](#) ("Use of information and communication technology resources and data") and acknowledge that they understand and are bound by the terms and conditions mentioned therein.

4 Shared and Generic Accounts

- 4.1 In order to ensure accountability; the use of shared accounts is prohibited. Where technical limitations result in the presence of shared accounts (e.g. built-in system accounts), their privileges shall be reduced to a minimum, and knowledge of the associated credentials and the use of these accounts must be limited to the minimum number of people necessary and clearly documented.
- 4.2 The use of generic accounts is allowed only where (a) there is a clearly documented need (e.g. official email addresses that are operated by multiple staff members), and (b) knowledge of access credentials and use of these accounts are limited to the minimum number of people necessary, and clearly documented.

5 Expiration of User Accounts

- 5.1 Internal user accounts shall automatically expire at the end of the contract or two (2) years from the date of creation of the user account unless the contract is renewed earlier.

6 Removal of Access Rights

- 6.1 When users no longer require access, the function that requested the account shall notify the relevant helpdesk or system owner to disable the user's account and/or authorizations. The procedures shall include communication with ICT staff, security staff (i.e., facilities), and any other relevant areas that will need to remove access rights as appropriate to that facility. In case a service is not accessed for more than consecutive 3 months, then access rights shall be removed.

7 Privilege Management

- 7.1 Users requiring elevated access privileges to perform their official duties shall be assigned an additional, different account with the appropriate privileges. This privileged account shall not be used for tasks that can be achieved with a standard user account.

- 7.2 The use of privileged accounts shall be logged, and all modifications to privileged accounts shall be documented and reviewed periodically.
- 7.3 Standard user accounts on workstations shall not be granted administrative privileges which include the ability to override system or application controls. Restricting such privileged access for day-to-day accounts is a proven method in limiting the damage malware can cause to user systems.

8 Review of User Access Rights

- 8.1 Information owners shall review the access privileges of user accounts every twelve (12) months to determine if access rights are still commensurate to the user's job duties. User accounts with privileged access rights shall be reviewed every six (6) months. Documentation for such reviews shall include information about who conducted the review, and what action (if any) was taken by the application owner, and shall be maintained according to the published retention schedule.
- 8.2 Access to classified information shall be granted only when specifically required carrying out official duties ("need-to-know"). Access to unclassified and public information is provided to users on a "need to share" basis. This concept makes information available, discoverable and accessible for the purpose of knowledge sharing and enables innovation and improvements by building on others' experiences and lessons learned.

9 Unattended User Equipment

- 9.1 Desktop and portable systems shall be configured to protect unattended equipment from unauthorized access or misuse. A password protected screen saver program shall be activated if the information resource is not in use for a period of 15 minutes of inactivity.

10 Session Timeout

- 10.1 Systems and applications shall support a timeout facility which suspends or clears active session screens after a defined period of inactivity. Re-establishment of the session shall take place only after the user has provided a valid password. It is recommended that end users are alerted that sessions will timeout. The following guidelines shall be followed:
- For Level 1, no session timeout is required.
 - For Level 2, a session shall timeout after 30 minutes of inactivity
 - For Level 3, a session shall timeout after 15 minutes of inactivity

11 Secure Log-on Procedures

- 11.1 Passwords shall not be displayed in clear text when entered and shall be hidden ("ghosted out") with such characters as bullets or asterisks.
- 11.2 A warning banner shall be implemented to display notice that the information system shall only be accessed by authorized users. The following banner message shall be displayed, along with any additional relevant information:

Acceptable Use Notification

Unauthorized access to this United Nations Computer System is prohibited by ST/SGB/2004/15 ("Use of information and communication technology resources and data" of 29 November 2004). Authorized users shall ensure that their use of Information and

Communication Technology (ICT) resources and ICT data is consistent with their obligations as staff members or such other obligations as may apply to them. All use of ICT resources and ICT data is subject to monitoring and investigation as set forth in ST/SGB/2004/15. Use of this system by any user, authorized or unauthorized, constitutes consent to the applicable UN regulations and rules.

12 System Lockout Due to Failed Login Attempts

- 12.1 All systems must lockout user accounts (at least temporarily) if a maximum number of authentication attempts are exceeded. The recommended minimum thresholds are: lockout for at least 15 minutes if at least ten invalid login attempts have occurred over a period of 15 minutes or less.
- 12.2 Accounts on systems that grant access to classified information must be locked out after ten invalid login attempts (a successful login attempt will reset that count), and will remain locked until the affected user requests the account to be unlocked.

13 Use of System Utilities

- 13.1 The use of system utilities and commands that bypass access controls shall be restricted to those individuals who require such access to perform their official duties. The use of such system utilities shall be logged.

14 Network Access Control

- 14.1 All devices connected to the network must meet the applicable minimum standards as defined in this document. Any devices not meeting these minimum standards can be disconnected by the responsible network service provider.

15 Passwords

Sensitivity of Passwords

- 15.1 All passwords are to be treated as sensitive and confidential United Nations information.

Password Controls

- 15.2 Systematic controls shall be in place to display and enforce the applicable password complexity rules and allow users to select and change their own passwords. Password controls shall include a confirmation procedure to allow for input errors and enforce a choice of quality passwords. The system must provide users with a mechanism to change their password; and this mechanism shall not require the intervention of the system operator or third parties.

Storage and Transmission of Passwords

- 15.3 Passwords shall not be stored in clear text, in simple coded form, or with reversible encryption, but as a salted hash. To minimize the risk of unauthorized interception, passwords shall be transmitted through an encrypted channel.
- 15.4 No usernames/password combinations shall be hard coded in scripts or clear text files.

Initial Password Issuance and Password Reset

15.5 All initial passwords and password resets shall be issued with a time limited unique One Time Password (OTP) which requires the user to change the password the first time it is used.

Secure Delivery of Access Credentials

15.6 Access credentials such as usernames and passwords must be provided to users in a secure manner. A username and a One Time Password may be sent via email, but not in a single message containing both.

15.7 If the One Time Password cannot be sent via email it shall be communicated directly to the account holder or an authorized representative.

Suspected Password Compromise

15.8 If an account or password is suspected to have been compromised, the incident shall be reported immediately to the local IT helpdesk, and all related passwords changed immediately.

15.9 Operators of ICT systems may enable approved multi-factor authentication solution and/or suspend accounts or reset passwords if there is an indication that the password may have been compromised.

Password Strength and Complexity

15.10 All passwords shall conform to the following specifications:

1. At least twelve characters long; more than 14 characters is better;
2. Different from the default (initial) password;
3. Not be the same as the username;
4. Composed of at least three of the following character classes
 - a) For level 2 & 3 systems, passwords must be composed of at least three of the following classes:
 - b) For level 1 systems passwords only two of the following character classes are required:
 - upper case letters: ABCDEFGHIJKLMNOPQRSTUVWXYZ
 - lower case letters: abcdefghijklmnopqrstuvwxyz
 - numbers: 0123456789
 - punctuation marks: !@#\$%^&*()+=\`{}|:~';<>?,./)
5. Not be based on a word found in dictionaries of any language or based on simple patters such as "aaabbb", "qwerty", "zyxwvuts", "123321", etc.

15.11 Users should be encouraged not to base their password on any personal information that is easily available to potential adversaries, such as names of family members, pets, friends, co-workers, birthdays, addresses, phone numbers etc.

15.12 Password guidelines should be made available to users.

Password Reuse

15.13 Systems shall be set to prevent the re-use of the previous *five* passwords.

- 15.14 All passwords used on United Nations ICT systems must be different from those used on external systems (such as personal email, option trading, benefits, etc.).

Compliance

- 15.15 This document is written to address components of the following sections of the ISO/IEC 27001:2013 Standard:

- Section A 9.1.1 Access control policy
- Section A 9.2.1 User registration and de-registration
- Section A 9.2.3 Management of privileged access rights
- Section A 9.4.3 Password management system
- Section A 9.2.5 Review of user access rights
- Section A 11.2.8 Unattended user equipment
- Section A 11.2.9 Clear desk and clear screen policy
- Section A 9.1.2 Access to networks and network services
- Section A 13.1.3 Segregation in networks
- Section A 13.1.1 Network controls
- Section A 9.2.4 Management of secret authentication information of users
- Section A 9.4.3 Password management system
- Section A 9.4.4 Use of privileged utility programs

16 References

- [ST/SGB/2004/15](#) (“Use of information and communication technology resources and data”).
- [ST/SGB/2007/6](#) (“Information sensitivity, classification and handling”).
- Information Security Policy Directive for the United Nations Secretariat (<https://iseek.un.org/departments/policies>).

17 Ongoing Revisions

- 17.1 This ICT Technical Procedure must be reviewed by the ICT Policy Committee:

- a) On an ongoing basis, at least once a year;
- b) After a major internal security incident has taken place; and
- c) following a substantial change to any of the reference Secretary General’s Bulletins (SGBs)

--- End of Document ---

Annex 7b Software Development Technical Procedure

Software Development United Nations Secretariat ICT Technical Procedure

Ref: APP.02.PROC



Revision History

Serial Number	Release Description	Release Number	Release Date	Author(s)
1.	New document	1.0	23 Nov 2015	Endorsed by ICT Policy Committee

Approved By



Atefeh Riazi, ASG/CITO

Date:

20 / 12 / 2015

Software Development United Nations Secretariat ICT Technical Procedure

Section 1

Purpose

- 1.1 The objective of this procedure is to define controls that must be followed during software development and maintenance. This procedure standardizes software development activities, and will result in a consistent outcome of software development processes and a higher quality product delivered to end users.

Section 2

Scope

- 2.1 This procedure applies to all software development and enhancement activities carried out by United Nations Secretariat personnel and/or external contracted software development resources.

Section 3

Software Development Project Requirements

- 3.1 Software development and related activities should be managed as projects. The UN Secretariat has selected PRINCE2 (Projects in Controlled Environments, version 2) as the standard methodology to be utilized for the management of software development projects. As per PRINCE2 methodology, a set of standard artifacts controls each phase of a project as well as its governance. Depending on the size and complexity of the software development project, appropriate standard PRINCE2 artifacts should be established and maintained in line with the principles outlined in the [Project Management Handbook](#).
- 3.2 Every software development project should have a business owner "primary department/office" that is accountable for the requirements definition, the change management process associated with the software and the resulting benefits realization. This is often the business unit that represents the largest group of users, or that has the mandate for policies and processes associated with the functions that the software supports. In addition, a data owner must be identified for all the data contained in the software. The data owner is responsible for the classification of the data and the determination of criticality level of supported business function in adherence with the requirements provided in the Disaster Recovery Planning UN Secretariat ICT Technical Procedure.

3.3 Software development work should be initiated upon the agreement from management on project scope, funding and data custody in compliance with existing ICT governance procedures including the ICT project management framework.

Section 4

Software Development Methodology

4.1 Software developed at United Nations should apply the "Agile" or "Waterfall" software development methodology.

4.1.1. Waterfall software development methodology should be used when: (a) there is a clear picture of what the final product should be, (b) when clients are unable to change the scope of the project once it has begun, and (c) when definition, rather than speed, is key to a successful user adoption. For details on the UN Waterfall Software Development Lifecycle Methodology and documentation requirements, refer to Annex I.

4.1.2 Agile software development methodology should be used when: (a) software should be deployed quickly b) effort is focused to delivering business value for the end user in a timely manner, and c) stakeholders are engaged in continuous improvement. For details on the Agile methodology and required documentation, refer to Annex II.

4.2 Regardless of the selected software development methodology, best practices, such as secure code development, code reviews, task segregation, information security reviews, performance audits, or testing with select users must be followed.

4.3 Developers must ensure that deliverables required by each step of the software development process are produced in a timely manner, such as specifications, design documentation, code, test code, test plans, technical documentation and user documentation.

Section 5

Quality Assurance

5.1 Quality Assurance processes should be built-in over the duration of the software development life-cycle and should be included in the project decision making process, ensuring that the developed software meets stated requirements and end user acceptance thresholds.

5.2 The most important objective of the Quality Assurance processes is to ensure proper functioning of core business use cases. Testing efforts should be prioritized based on the risk and impact associated with a

use case failing in the production system. In addition, the system should meet the established performance and availability thresholds of the operating environment.

5.3 The software should be validated from the end users' perspective, rather than from the developer's perspective. Sufficient documentation should be produced during testing, and proper time should be allocated to this activity.

5.4 Where feasible, tests should be automated, freeing Quality Assurance resources for validation of the business impact the software is expected to generate.

Section 6

Architecture review, Information Security and Disaster Recovery requirements

6.1 To effectively establish and maintain required operational levels of ICT resources and data, architecture, information security and disaster recovery control requirements must be identified based on criteria determined during the project initiation phase.

6.2 Information security must be integrated into project involving software development by implementing at a minimum the following three steps (details are provided in the “Integrating Information Security in the UN Project Life Cycle” guideline -

<https://iseek.un.org/sites/iseek.un.org/files/iseek/LibraryDocuments/1792-20100129150651544118.pdf>):

(i) Step 1: As part of the project initiation phase, business owners must define the security requirements and classify the data that will be used by the system.

(ii) Step 2: During the initial design phase, the project team must determine the specific security controls that need to be implemented to achieve the defined requirements.

(iii) Step 3: As part of the quality control/signoff stage—i.e. before the application “goes live”—the suitability and correct implementation of the specified controls including restricting access based on the data classification need to be verified.

6.3 Information security requirements are business requirements that are defined with respect to confidentiality, integrity, availability, and auditability or accountability; in addition, the exposure, or accessibility of the software that is being developed. The Information Security Form

(<https://iseek.un.org/sites/iseek.un.org/files/iseek/LibraryDocuments/1630-201403111444115305145.docx>) must be completed and provided to ICT Security function prior to moving into development phase.

- 6.4 Information security requirements must be determined and implemented for each project as defined in the [Project Management Handbook](#). Information security must be considered and maintained for data stored, handled, and/or processed by the software throughout their entire life cycle.
- 6.5 Identified information security and disaster recovery requirements must be incorporated into the resource design and implemented during the build and subsequent stages of the development process as well as throughout the entire software life-cycle, as appropriate.
- 6.6 Implemented information security controls must be periodically assessed, monitored, reviewed and updated to ensure that they operate effectively and as intended.

Section 7

Reuse of Software Artifacts

- 7.1 Software reuse encompasses more than just source code. Where feasible, a broad range of software artifacts should be reused.
- 7.2 The following software development artifacts are candidates for reuse: requirements models and specifications, source code, user and technical documentation, test plans and reference data among others. Usage of freely available open-source libraries should be also reviewed with the aim to maximize development effectiveness and efficiency while bearing in mind the impact of their respective licenses on the overall code base.
- 7.3 To store and share deliverables for future reference and reuse, specialized tools should be used, such as wikis for technical and user documentation, version control for code, issue-tracking systems for capturing bug reports and minor change requests, and collaboration tools for the software development team collaboration.

Section 8



Coding Standards

- 8.1 Software coding standards are language-specific programming rules that enhance the readability of the code, thus reducing the probability of introducing errors into software applications.
- 8.2 Each software solution should follow a specified coding standard defined for the programming language and the development environment used in accordance with the security controls required for data classification. Peer code reviews should be applied by development teams to ensure enhanced code quality.
- 8.3 When possible, developers should include inline comments in the code.

Section 9

Configuration Management

- 9.1 Configuration management software should be utilized for all software development and maintenance activities. All software development artifacts should be version controlled.

Section 10

Testing and Migration into Production

- 10.1 There should be a minimum of separate production and development environments. Ideally there should also be a test environment.
- 10.2 Software testing procedures must be defined for each application. Test plans should be defined, and they should include test cases derived from functional requirements use cases. Users should be involved in testing as much as possible to achieve better results. Regression and integration testing should be performed for each release of code that is deployed. As much as possible, regression testing and deployment to the different environments should be automated.
- 10.3 User acceptance testing and sign-offs by the predefined application owner is required prior to the system being deployed to the production environment.
- 10.4 A separation between the production, development, and test environments is strongly recommended to ensure that security is rigorously maintained for the production system. Separate development and test

environments can maximize developer productivity with fewer security restrictions and configuration overhead.

- 10.5. Application developers should not have access to production systems and data, unless specifically authorized by the data owner to carry-out specific, authorized, and time bound set of activities (e.g. in case of troubleshooting problems and or implementing emergency changes in systems for which developers' intervention is required).
- 10.6. ICT operations personnel (system administrators and database administrators) is normally responsible for moving systems' releases to production environment through the release management process as well as for implementing authorized changes to production systems as part of the change management process to ensure continuing availability of the ICT resource(s).

Section 11

Technical and User Documentation

- 11.1 Technical documentation describes the functionality and architecture of the software solution. Technical teams should provide documentation that describes the overall architecture, the technical dependencies as well as the coding methods of the solution. Technical documentation includes: system requirements (as an expansion of the system requirements included in the functional requirements documentation), system design, system architecture, test methods and plans (test methods include test cases derived from use cases in the functional requirements), and data models for database driven applications.
- 11.2 User documentation describes application functionality from the user's point of view. It should be comprehensive without being too verbose. The language should be adapted to the target audience, and should not apply technical jargon. User documentation should be balanced with text and screen-shots to allow better comprehension. Other documentation formats like presentations, video tutorials or help functionalities within the system itself should be considered for achieving best results. Where feasible, prototyping or mock-ups should be employed to promote a better understanding of the proposed application design and user interface during the requirements gathering phase.
- 11.3 All technical and user documentation should be archived and kept current when changes are introduced following the initial release.

Section 12

Source Code Archiving

- 12.1 System source code should be archived. Any ICT professional with adequate access rights and technical skills should be able to retrieve the latest version of the source code, perform changes and produce a version of the software solution that can be rolled out into the production environment.
- 12.2 All source code, documentation and rebuilding instructions should be backed up properly. Access to backups should be possible for authorized personnel only.
- 12.3 Periodic rebuilding exercises should be performed to validate the source code archiving strategy.
- 12.4 Changes on the source code level should be compared between versions and branches. If possible, development should be virtualized and appropriate environments for backup purposes should be established and used.
- 12.5 Passwords, certificates, and other security related information should be stored safely and can be obtained by key UN personnel with appropriate authorization.

Section 13

Applications Registry

- 13.1 Every software solution must be registered in the global application registry (<http://uniteapps.un.org>) prior to its release into production.

Section 14

Ongoing Revisions

- 14.1 This ICT Technical Procedure must be reviewed by the ICT Policy Committee on an ongoing basis, at least once a year.

--- End of Document ---

Annex I - Waterfall Software Development

A1.1 Introduction

The UN Waterfall Software Development Lifecycle Methodology provides a simplified framework for managing, building and deploying UN ICT software solutions. The specified methodology is compatible with the UN project management methodology and is integrated with the UN ICT governance process. Software development projects must be managed in conjunction with the software development life cycle (SDLC) process, as outlined below in accordance with the PRINCE2 project management methodology, where following criteria apply:

- a. there is a clear picture of what the final product should be,
- b. clients are unable to change the scope of the project once it has begun, and
- c. definition, rather than speed, is key to a successful user adoption.

Below is a list of required documentation^[1] for all software development that falls under this category.

A1.2 Required Documents

1. Initiation Phase

a. Business Case

Prior to the official initiation of a project, the Business Case is the first document to be created. It is the responsibility of the business requester to produce this document. The Business Case describes the potential change, idea or problem to be resolved. It includes the scope, objectives, deliverables, benefits, assumptions, constraints, risks and resource estimates. This document is completed by the business units, and is submitted for approval to the Project Review Committee (PRC) through the OICT/Project Management Office (PMO), at pmo@un.org.

b. Architecture, Information Security and Disaster Recovery Requirements

During the initiation phase the specific information security requirements for each ICT resource (including systems/applications) must be defined. Information security requirements are business

¹ Initiation phase templates are available on iSeek, under the project management page (https://iseek.un.org/webpgdept1630_1). Other templates are attached with this procedure (see A1.3 for the list of attachments)

requirements that are defined with respect to confidentiality, integrity, availability, and auditability or accountability; in addition, the exposure, or accessibility of a system/application must be specified.

Project Initiation Document – PID

Upon project approval, a Project Initiation Document is developed, which contains a description of the process that will be followed and the project team's and client's responsibilities. This document is signed by all involved including the client accepting commitment. No development should commence prior to obtaining signatures of all parties on this document.

All templates mentioned above are available on iSeek, under https://iseek.un.org/webpgdept1630_1

2. Requirements Gathering and Analysis Phase

a. Functional Requirements Document

The document identifies the requirements for functionality and usability, as well as design constraints.

b. Technical Requirements Document

Contains requirements related to information Graphical User Interface (GUI), Reporting Requirements, Integration Requirements, Capacity Requirements and Security Requirements.

3. Design Phase

a. Information Security Implementation Plan

This plan is produced by the Application/Solution Architect or Developer based on Information Security requirements and on the technical limitations of the solution being designed.

4. Build/Test Phase

a. Test Plan

Test plan, schedule and test scripts are sent to the client for review and testing during User Acceptance testing phase. This document is prepared by ICT Data Owner, the Application Owner and the Project Manager, supported by the Business Analyst.

b. Test Cases and Results

The test case and test results documents consolidate the outcome of the testing and offer further analysis of the solution with the client; and address bugs and show stoppers with the development team prior to the final deployment.

5. Deployment and Closure Phase

a. Production Deployment Preparation and High Level Implementation Plan

This Plan is signed by business stakeholders and project teams in order to proceed with a full deployment of the solution.

b. Pre-Deployment Check List

This Plan is sent to the Application Support team in order to confirm the timelines for production deployment.

c. End Project Report

Report signed by all parties to confirm that the final product has been delivered according to functional and technical specifications. The product shall be in production for a recommended timeframe of 6 months before any additional enhancements will be eventually applied.

A1.3 Attachments:

- 1- Software Development Waterfall Templates - Functional Requirements
- 2- Software Development Waterfall Templates - Technical Requirements
- 3- Software Development Waterfall Templates - Test Plan
- 4- Software Development Waterfall Templates - Test Cases and Results
- 5- Software Development Waterfall Templates - Production Deployment Preparation & High Level Implementation Plan
- 6- Software Development Waterfall Templates - Deployment Checklist

Annex II - Agile Software Development

A2.1. Introduction

Agile Software Development enables teams to deal with changing requirements (“unpredictability”) throughout the software development life cycle on both large and small projects. Primary goals of Agile Software Development are that:

- software should be deployed early and often (‘iteratively’),
- effort is focused to delivering increased business value for the end user (‘incremental’),
- stakeholders are engaged in continuous improvement.

The following are examples when utilizing an agile methodology is recommended:

- a) the scope of the project is not clearly articulated and clients are likely to need changes in the scope of the project or there is a risk of the requirements changing during the project
- b) it is important to realize value early, and clients would like to start using (parts of) the software as soon as possible
- c) integration of key stakeholders into the development process is possible and desirable

A2.2. Agile Methodologies

There are multiple Agile Software Development Methods ^[2] to choose from, however all of them share the values outlined in the ‘Agile Manifesto’^[3]. Criteria that can help selecting an appropriate method are:

- Prior experience and personal preference
- Composition of the development team
- availability of stakeholders and team members (e.g. geographical distribution)
- Skillset and experience of team members
- Prevailing methodology / ease of getting help
- Already available tools

Within the Secretariat the method of choice is normally SCRUM thanks to its simplicity, precise definition of roles and high degree of flexibility. However depending on the specific software project, combinations

² <http://www.codeproject.com/Articles/604417/Agile-software-development-methodologies-and-how-t>

³ <http://agilemanifesto.org/>

of methodologies can be used as well (e.g. SCRUM for overall coordination, including aspects of ‘Extreme Programming’)

A2.3. Agile Artefacts

3.1 Product Backlog Item (or User Story)

- a) Is a documented requirement that describes context and value to be delivered
- b) Is precise and cannot be broken down further
- c) Includes user acceptance test success criteria
- d) Receives a ‘priority’ through the ‘Sprint Planning’ process

3.2 Product Backlog

- a) The product backlog is a prioritized list of user stories or product backlog items.
- b) The product backlog should be visible to all stakeholders in the project
- c) The product backlog is prioritized by a product owner
- d) New Product Backlog Items can be added to the backlog anytime
- e) Items in the backlog can be re-prioritized at anytime

3.3 Iteration (or Sprint)

- a) An Iteration is a subset of Product Backlog Items (Iteration/Sprint Backlog) that the development team will deliver in set timeframe (usually one or two weeks)
- b) Each Iteration is an incremental improvement over the previous Iteration
- c) An Iteration contains the highest prioritized User Stories
- d) Each Product Backlog Item in the Iteration has to be tested against the acceptance criteria before being deployed
- e) If customer sign-off is required, each Iteration can be cleared by the client before release to production (User Acceptance)

f) The team responsible for the sprint commits to delivering the scope of the sprint as planned and the scope cannot change during the sprint

A2.4. Agile and PRINCE2

When adopting an Agile Methodology it has to be ensured that the Software Development Lifecycle produces the required documentation to satisfy the requirements of the overarching Project Management Methodology, namely PRINCE 2.

Embracing the Agile Manifesto, Documentation should be secondary to delivering *Working Software*, however work and progress need to be documented and resource utilization needs to be justified.

4.1 Process overlap

Within the PRINCE 2 process map, Agile Methodologies are best applied for

a) **Planning**, an additional outcome of a project plan should be ‘Epics’, outlining top level building blocks that need to be delivered in order to successfully complete the project. An Epic comprises multiple User Stories that shall be implemented in different sprints. Using Epics helps keeping the deliverables (i.e. “contractual requirements”) in perspective and allows tracking the overall development progress.

- Please bear in mind that Epics as well as the underlying User Stories may change at any point throughout the project (‘embracing change’) therefore a ‘completion rate’ indicator is potentially volatile.

b) **Controlling a Stage**, handling day-to-day operation. E.g. a ‘Sprint Burndown Chart’ provides ‘live’ information on the current progress and a ‘Sprint Report’ outlines all the work that was completed within a set timeframe (i.e. Sprint).

c) **Managing Product Delivery**, Starting with ‘User Stories’ and identifying ‘Acceptance Criteria’ a work package can be measured. Through the atomic (minimum meaningful) nature of a work package, efforts estimation and prioritization are easily achievable.

In order to best utilize Agile Methodologies the use of Tools is highly recommended. (e.g. Atlassian JIRA)

4.2 Mapping Deliverables

Artefacts (ideally automatically generated), resulting from the Agile approach, can be used to compose deliverables recommended by PRINCE 2. The below table gives an example of such a mapping:

PRINCE 2 Deliverable	Agile Artefact
Risk Log	Acceptance Criteria
Business Case	Epic
Product Description	Product Backlog
Quality Plan	(Common) Acceptance Criteria
Project Plan	<ul style="list-style-type: none"> • Epics • Schedule of Iteration Releases (Sprint Duration)
Work Packages	Product Backlog Item

Each iteration should coincide with PRINCE2's management reporting cycles.

Annex 7c Minimum Security Requirements

Minimum Security Requirements for Public Websites of the United Nations ICT Technical Procedure

Ref: SEC.03.PROC

Revision History

Serial Number	Release Description	Release Number	Release Date	Author(s)
1.	Endorsed by the ICT Policy Committee	1.0	6 December 2013	Endorsed by the ICT Policy Committee
2.	Approved by CITO	1.0	9 December 2013	Atefeh Riazi, ASG/CITO
3.	<p>Scheduled revision by the ICT Policy Committee.</p> <p><u>Changes:</u></p> <ul style="list-style-type: none"> - Added “Overview” section - Added “Section 1: Purpose and Scope” - Added “Section 2: Responsibilities” - Replaced “shall” with “must” for “baseline” requirements under Section 3. - Other small edits for correction or clarification - Added Section 4 “Ongoing Revisions” 	2.0	17 March 2017	Revision endorsed by the ICT Policy Committee

Approved By



Atefeh Riazi, ASG/CITO

Date:

9/Apr/1/ 2017

Minimum Security Requirements for Public Websites of the United Nations ICT Technical Procedure¹

Overview

- Public websites (directly accessible from the Internet) are inherently vulnerable to various types of attacks and, therefore, require at a minimum some basic security measures. Attacks against websites can be classified as follows:
 - (a) *Availability attacks*: including Denial of Service (DoS), and destruction of websites or their content.
 - (b) *Integrity attacks*: such as attempts to modify the content of a website, either visibly (“defacement”), or by adding or embedding malicious software or code in order to negatively affect subsequent visitors of the site.
 - (c) *Confidentiality attacks*: unauthorized access to sensitive data, such as information about users, including email addresses and access credentials.
- In addition, a compromised public website can also be used to host malware and/or illegal content, or as a stepping stone to attack the Organization’s internal network or that of a partner organization.
- Website vulnerabilities that could be exploited by attacks include:
 - (d) Known vulnerabilities in the underlying third-party software (operating systems, web servers, databases, web content management frameworks, etc.),
 - (e) Vulnerabilities in the specific code developed for the site, and/or
 - (f) Social engineering, by tricking website administrator or users with elevated access rights to modify configuration/parameters that can then be exploited.

Section 1

Purpose and Scope

1.1 The purpose of this procedure is to establish minimum security requirements for United Nations websites. It defines a baseline of the most essential controls that must be implemented on any website of the United Nations as a matter of urgency.

¹ The controls defined in this technical procedure are based on recommendations of an inter-agency working group operating under the Chiefs Executives Board.

- 1.2 This policy applies to all websites that are directly accessible from the Internet and are maintained and/or operated by or for any department or office of the United Nation Secretariat, including those away from Headquarters, as well as missions and information centres (“author departments”, as defined in ST/AI/2001/5 “United Nations Internet publishing”).
- 1.3 This document shall be read in conjunction with ST/AI/2001/5 “United Nations Internet publishing, information security policies, and other ICT policies and guidelines available on the UN intranet (iseek.un.org/departments/policies)
- 1.4 The controls mandated by this procedure provide only a minimum baseline that is mandatory for all types of websites. In many cases, additional controls will be required to adequately protect complex “web applications” or websites that contain sensitive information. The Office of Information and Communications Technology can assist with the assessment of requirements and advise on specific controls. Additional controls may include “Best practice” guidelines and checklists for web application security, which are available from many software vendors and distributors, as well as community organizations dedicated to this topic.

Section 2

Responsibilities

- 2.1 All Secretariat organizational entities - including ICT service providers, departments and offices - that maintain, or plan to establish one or more websites, have the responsibility to ensure that all applicable controls described in this Procedure are implemented on all websites that they own, maintain and/or operate.
- 2.2 The Office of Information and Communications Technology is mandated to verify the effective implementation of these minimum requirements. Where non-compliance of a website is determined to pose an operational or reputational risk to the Secretariat, access to the website will be limited until any missing or insufficient controls have been implemented.
- 2.3 Where third parties are involved in the development, maintenance or hosting of a website, the list of required controls listed in this Technical Procedure should be included as a mandatory element in any related contract.
- 2.4 As DoS attacks typically originate from a multitude of locations, they are best mitigated at the network level. Internet Service Providers (ISPs) are typically in the best position to provide this service. The operators of “high profile” websites that are likely to become the target of such DoS attacks should therefore include the protection against such attacks in the service contract with their respective ISPs.

Section 3

ICT Technical Procedure

Baseline for all public websites of the United Nations

- 3.1 All websites must have an assigned and accountable owner, and be registered with the Office of Information and Communications Technology. At the time of registration the responsible department or office must indicate the level of compliance, and in the case of partial compliance include a plan describing the steps and time frame required to achieve compliance with this instruction.
- 3.2 All components (web server(s), database(s) and other back-end server(s), web content management framework, etc.) must be configured according to the relevant vendor/distributor security recommendations and internal practices and policies of the United Nations Secretariat. This statement includes the requirement to change the (default) passwords for all pre-defined accounts, and to use strong passwords that are compliant with Organization's password policy
- 3.3 All applicable security updates ("patches") must be assessed within 30 days and acted upon accordingly.
- 3.4 Databases and other back-end systems may be accessed only indirectly through the web application, and must not be made directly accessible from the Internet. Only the services that are required for the site's functionality may be made accessible.
- 3.5 All connections from web application front-ends to back-end systems must be configured to use minimal privileges. Processes on the servers must run with minimal privileges. When feasible, database service accounts must only be able to read, not update, content. "Write" access must be limited to the database table that is being updated.
- 3.6 All user-provided input must be validated before it is passed on to back-end systems or returned to the user. Input must be validated against its type (string, number, date, etc.), range (e.g. positive integers), size (number of characters), valid syntax or set of valid responses (e.g. in drop down lists). Invalid input must either be rejected or "sanitized" by removing or safely encoding any invalid elements from the user-provided input.
- 3.7 Websites that allow uploading of files (images, documents, etc.) must verify the file type and, where possible, be scanned for malicious code.
- 3.8 Web applications must not display error or system messages that reveal information about the underlying configuration.
- 3.9 Information that is not necessary for the functioning of the web server must be removed or moved to a more secure location. Components (widgets, plugins, add-ons, etc.) that are not necessary for the functioning of the web server must be disabled or uninstalled. Any component that is essential for the functioning of the website must be tested for vulnerabilities, approved and regularly maintained and updated.

- 3.10 Relevant activity on the server and in the application must be monitored and tracked by appropriate logging mechanisms for auditing and accountability purposes, according to the policies of the United Nations Secretariat (see: System Monitoring and Log Management TP). The generated information must be secured against tampering and retained according to applicable retention policies (see: Retention Schedule for ICT Records TP).
- 3.11 Access with elevated access rights (e.g. for maintenance or administration purposes) must be protected, e.g. using two-factor authentication or limiting access to specific locations.

Additional controls for websites that allow or require users to login

The following additional requirements apply to all websites that allow or require users to login:

- 3.12 All sites must use the “secure hypertext transfer protocol” (HTTPS) to ensure that user credentials and other potentially confidential content cannot be intercepted during transmission. HTTPS uses secure socket layer certificates to verify the authenticity of a website and encrypt all communications between the user and the website. Certificates must be (a) issued by a vendor that is automatically recognized as “trusted” by major browsers, (b) replaced before their expiration date, and (c) utilize secure cryptographic ciphers and keys.^[2]
- 3.13 Passwords must not be stored in “clear text”, but in a form that protects them even in case of a compromise. This implies that the “send my password” functionality is not possible, only the “send a link to change password” is possible.
- 3.14 Users shall be able to change their password without intervention of another person.
- 3.15 Controls that prevent brute-force attacks against user accounts must be implemented, e.g. by “locking out” accounts after a pre-defined number of invalid login attempts, or by displaying a CAPTCHA test (or alternative mechanisms) to prevent automated login attempts
- 3.16 Users shall only be able to access content for which they possess specific authorization.
- 3.17 Authenticated users shall be able to log out. All sessions shall be maintained by the web server in a secure manner. Sessions must be maintained using the controls of the web content management framework. The session id must be generated randomly at logon (i.e. not be guessable), long enough to prevent brute-force attacks (e.g. 20 characters or longer), and not be disclosed in the URL. Sessions must be invalidated when the user logs out, terminated after a pre-defined period of inactivity, and set to automatically expire after a maximum amount of time regardless of activity.

² OICT has contracted with a third party vendor to issue such certificates. Details of this service as well as instructions on how to request certificates are provided at https://iseek.un.org/departamental_page/ssl-certificates-2016-2017

Section 4

Ongoing Revisions

4.1 This ICT Technical Procedure must be reviewed by the ICT Policy Committee:

- a) on an ongoing basis, at least once a year
- b) after a major internal security incident has taken place
- c) upon major changes to the United Nations internal network architecture

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