19 Sep 2012   IMSTAM(FC)-0066-2012

To :   See Distribution List

From :   Purchasing & Contracting Officer

Subject :   CALL FOR COMPETITIVE BIDDING (CFB) **IMS 2012-008** FOR THE
                DEVELOPMENT OF AN ON-LINE COURSE PACKAGE AND USER
                MANUAL (ON LINE TUTORIAL) CONCERNING A WEB-BASED
                APPLICATION CALLED SMIR-ON-LINE (SPECTRUM MANAGEMENT
                INFORMATION REPOSITORY ON LINE).

1.   This call for competitive bidding aims to obtain tenders for **the development of an
        on-line course package and user manual (on line Tutorial) concerning a web-
        based application called SMIR-On-Line** for the International Military Staff,
        NHQC3S.

2.   We believe you may be interested in responding to the enclosed call for bidding.

3.   Bids must comply with the General Contract Conditions and the Statement of Work,
        but additional options suggested by Contractors will also be considered.

4.   Your attention is drawn to the closing date/time for bids :

                       25 October 2012 – 12.00 Hr (Brussels time).

5.   The bids should be addressed to:

        Ernesto SCOGLIONERO
        Purchasing & Contracting Assistant (H-118)
        North Atlantic Treaty Organisation
        International Military Staff
        Boulevard Leopold III
        1110 Brussels, Belgium
        Tel : +32 (0)2 707 5739
        Fax : +32(0)2 707 5884
        ✆ : sa.p&c@hq.nato.int or scoglionero.ernesto@hq.nato.int

6. Questions relating to the General Contract Conditions or the Technical Specifications will be permitted. The point of contact is as follow:

Ernesto SCOGLIONERO
Purchasing & Contracting Assistant (H-118)
North Atlantic Treaty Organisation
International Military Staff
Boulevard Leopold III
1110 Brussels, Belgium
Tel : +32 (0)2 707 5739
Fax : +32(0)2 707 5884
✆ : sa.p&c@hq.nato.int or scoglionero.ernesto@hq.nato.int

7. All documents supplied by NATO in relation to this Call for Competitive Bidding are for use in bid preparation only within the bidding companies.

8. Prices for any options offered by the Bidder shall be quoted separately.

Mr. Ernesto SCOGLIONERO
Purchasing & Contracting Assistant
International Military Staff

Enclosures
I. General Contract Conditions
II. Technical Specifications/Statement of Work

Copy To : MA DG IMS, NHQC3S (Mr. Elliot,),RECORDS, FC IMS

Action Officer Mr. E.SCOGLIONERO, P&C Assistant (5341), Mr. I.DAVIES, Principal Administrator (Finance) to FC IMS (4593)

GENERAL CONTRACT CONDITIONS

SPECTRUM MANAGEMENT TOOLS : SMIR-On-Line TUTORIAL

1. **GENERAL CONTRACT SPECIFICATIONS**

   a. The Financial Controller of the International Military Staff (IMS), North Atlantic Treaty Organization (NATO), is responsible for applying the bidding procedure to meet the requirements of the Organization.

   b. Implementation of this procedure does not entail any obligation to award a contract. NATO may either decide not to let the contract or set the procedure in motion again, if necessary in a different form.

   c. When the contract covers several parts, the competent authority reserves the right to allocate some of them only and it may even decide that the other parts will be covered by one or more contracts, if necessary under a different procedure.

   d. Calls for bids may be altered or cancelled in whole or in part, before the closing date for bids, in which case the bidders are informed in writing.

   e. During the life of this contract, the Financial Controller IMS and his/her Purchasing & Contracting Officer (P&C Officer) will, in its relation with the contractor, represent NATO. The contractor shall formally direct all enquiries and/or correspondence relating to the contract to the P&C Officer. Any modifications to the object or any other aspect of the present contract will have to be authorised by the above authorities

2. **BIDS**

   a. Bids, drafted in English, must be received in duplicate in a sealed envelope before the closing date. This envelope should contain two sealed envelopes. The first envelope should contain the technical proposal, which will be evaluated by a technical assessment team. This envelope should be clearly marked "Statement of Work Proposal CFB IMS 2012-007" and should not contain any financial information. The second envelope should contain the financial proposal and be clearly marked "Financial Proposal CFB IMS 2012-007". The bids must be provided under tamper-proof/write protected CD format. Every CD will be marked with a unique and indelible number/name/description.

   b. Up to the closing date, bidders may modify or cancel their offers in whole or in part.

   c. If a bid is made for only part of the requirements, this has to be identified clearly in the proposal.

   d. (Potential) bidders should register their interest in bidding by sending a confirmatory email to: sa.p&c@hq.nato.int.The P&C Officer will ensure that registred bidders receive any further confirmation relevant to the Call for bids.

e. (Potential) bidders must seek any needed clarification as soon as possible. Such requests for clarification must be submitted in writing (facsimile and e-mail are acceptable) and must be received no later than 14 days before the bid closing date. Questions and the answers on these questions shall be forwarded to all other registered bidders. Questions relating to the General Contract Conditions or the Technical Specifications will be permitted. The point of contact is as follows:

Ernesto SCOGLIONERO
North Atlantic Treaty Organization
International Military Staff
Purchasing & Contracting Officer (T6208)
Boulevard Leopold III
1110 Brussels, Belgium

☎ +32(0)2 707 5739
🖨 +32 (0)2 707 5884
📧 sa.p&c@hq.nato.int or scoglionero.ernesto@hq.nato.int

f. Bid prices must be fixed and firm and valid for 60 days from the date of the bid, or until 31 December 2012, whichever is longer.

g. Bidders may take alternative proposals on a separate CD/file, which must be clearly marked "ALTERNATIVE".

h. Bids should contain the eventual costs for delivery at NATO's HQ. These costs will be mentioned separately in the financial proposal.

i. Bids should mention Recycling/Recupel costs (if needed).

j. Bids must contain a delivery schedule.

k. Requests for extensions of the bid closing date much reach the P&C Officer not later than 14 days prior to the bid closing date. That request should be justified very well. The P&C Officer decides either to grant or decline the extension.

3.   AWARDS

a. The Awards Committee meets in private.

b. The Awards Committee may accept or reject bids in whole or in part, as stated above.

c. The Awards Committee selects the valid bid which it considers the most advantageous, taking into account the quotation, the cost of utilization, the technical characteristics, the reliability of supplies, the professional and financial credibility of each bidder, the time schedule, any other relevant considerations, together with any "SUGGESTIONS" made in the bid, unless otherwise stipulated.

d. Bidders will be informed in writing whether their offer has been accepted or rejected. No reasons need be given.

4. SCOPE OF THE CONTRACT

a. The Contractor shall provide the required goods and services as described in Enclosure II.

b. The specifications described in Enclosure II are the minimum requirements.

c. The contractor shall provide the goods and services in the negotiated timeline. Any major departure from this timeline can lead to termination of the contract. A period of one third of the negotiated delivery period will be considered as a major departure.

d. Performance of the work covered by this contract shall be under the overall direction of the project manager, NATO Headquarters C3 Staff (NHQC3S).

e. Any software must be implemented as a NATO-network homed cloud-based solution, accessible through an internet browser, via a secure connection, with no vendor software installation required at the client.

f. The contractor will provide a warranty valid for one year for the material produced under this agreement and will correct this training material, without charge, should any significant error occur during this period.

5. PLACE AND HOURS OF WORK

a. The work will be performed off site. The NATO project manager will be available by phone, email and by face-to-face contact including site visits to the contractor's premises, if and as required.

b. The Contractor's personnel will be required to work with both military and civilian personnel and conform to the normal work schedule of NHQC3S. Normal duty hours will prevail but adjustments of work schedules may necessitate realignment from time to time.

6. **PRICES, PAYMENTS AND INVOICES**

a. The contract will be fixed price for the services as specified and in accordance with the agreed terms and conditions as set forth herein. The price will include a one-year warranty.

b. Payment for the services performed by the Contractor shall be paid within 30 days from receipt of acceptable invoices and in the currency set forth in the agreement.

c. Under Articles 9 and 10 of the Ottawa agreement approved by the act of 1st February 1955: "Services supplied and goods delivered to the Organisation for its official use shall be exempt from Value Added Tax for each operation, the cost of which is 123.95 Euros or more, exclusive of VAT. Goods and services supplied in this way will be treated as exports".

d. Invoices, in exemption of VAT, will be submitted in triple and give the following information: number of purchase order / agreement, description of supplies / services, sizes, quantities, prices, supplier's VAT identification and the appropriate VAT exemption statement i.e.:

- for host nation firms (Belgium): « Article 42 §3, 3° code de la TVA et/ou exemption des droits d'accises / accises spéciaux DL 1/76.979 du 4/10/83 » ;
- for firms from other EEC countries : "Article 15.10 from the EEC Council Directive 77/388/EEC";
- for firms from non-EEC countries: "Articles 9 and 10 of the Ottawa agreement approved by the act of 1st of February 1955".

e. For partial payments, the mention "Partial Payment n°...." will be added.

f. The supplier's bank account number, bank name and address will be clearly indicated (including IBAN and BIC). Invoices shall be submitted to the North Atlantic Treaty Organization, NHQC3S – Fund Manager T-3008, Boulevard Leopold III- B-1110 Bruxelles – Belgium.

g. The bidder acknowledges that the payment is exclusively due for services/goods rendered and received in accordance with the provisions of this contract and accepted as foreseen in this contract as performed to satisfaction of NATO, and will be adjusted accordingly.

h. For payments in the Single Euro Payment Area (SEPA), the default approach for supplier payments in Euro will be "Straight Through Process" (STP). Consequently, both parties will share any banking costs related to the payment transaction.

7. **CONTRACT PERIOD**

a. The contract will be effective from the day of the last signature by the contracting parties.

b. The time/duration for the project is to be in accordance with agreed delivery schedule.

c. The Contractor should propose a timetable for the execution of the project including if needed, the proposed number and location for face-to-face meetings for the NATO project manager to track project progress.

8. DELIVERABLES

a. The prime purpose of this contract is to provide the deliverables as mentioned in the Statement of Work (see Enclosure II).

b. The bidder acknowledges that any change on the scope of work of the present contract carried out by the contractor without previous authorization by the P&C Officer or Financial Controller will be considered to have been made at the contractor's own expense.

9. TERMINATION AND SUBSTITUTION RIGHTS

a. IMS, by written notice of two (2) weeks, may terminate this contract, in whole or in part, when it is in the IMS's best interests. If the contract is so terminated, NATO shall be liable only for payment in accordance with Article 6, Prices, Payments and Invoices, of this contract for work performed prior to the effective date of termination.

b. IMS may, for just cause, require the Contractor to remove, without any additional cost to NATO, one or more of his employees provided that notice in written form is given to the Contractor.

c. Additions, withdrawals or changes made by the Contractor in personnel assigned to this contract shall not be permitted without prior agreement with IMS in accordance with the terms and conditions of Article 10, Key Personnel, of this contract.

10. KEY PERSONNEL

The personnel provided under this contract are considered to be essential to the work being performed hereunder. If, nevertheless, the Contractor wishes to replace personnel, the Contractor shall notify the P&C Officer and shall submit justification of the impact on the programme. No substitution shall be made without the full knowledge and consent of the P&C Officer. In this case, the P&C Officer will prepare a contract modification to reflect the personnel changes. Notwithstanding the above, in the event of unforeseen personnel losses, the Contractor will be expected to take whatever measures are necessary to assure continued performance under this contract and any emergency replacement of key personnel will be submitted to the P&C Officer for consideration as soon as possible. All personnel must be citizens of NATO Member States.

11. RIGHTS IN TECHNICAL DATA

All technical data defined as all recorded information of a technical nature, specifications including computer software data, technical text, drawings, design type documents, instructions, illustrations, schematics or wiring diagrams, test procedures, training material and any other similar data resulting directly from the performance of this contract shall be the sole and exclusive property of NATO, and will be used by NATO nations for defence purpose.

12. COUNTRIES OF ORIGIN

The Contractor personnel must come from one of the NATO member countries, namely (in alphabetical order). ALBANIA, BELGIUM, BULGARIA, CANADA, CROATIA, CZECH REPUBLIC, DENMARK, ESTONIA, FRANCE, GERMANY, GREECE, HUNGARY, ICELAND, ITALY, LATVIA, LITHUANIA, LUXEMBOURG, NETHERLANDS, NORWAY, POLAND, PORTUGAL, RUMANIA, SLOVAKIA, SLOVENIA, SPAIN, TURKEY, UNITED KINGDOM and UNITED STATES.

13. CONTRACTOR PERSONNEL

All documentation, discussions, correspondence and meetings will be in English. The Contractor shall employ only highly skilled labour with thorough experience of the work to be performed.

14. WORK AT NATO

a. The Contractor personnel shall follow strictly the instructions from NATO officials regarding entrance to, and work at the site and stay within the indicated perimeter. Supervision will be carried out by NATO security officials.

b. Contractor personnel who receive security passes must ensure that they are worn visibly when they are at the NATO HQ site and removed on leaving.

c. All Contractor staff may be subjected to a personal search and a search of his/her vehicle, luggage and equipment while at the site.

d. It is strictly unauthorised to bring weapons, explosives or, dangerous materials into NATO HQ without the proper licences and authorisations from the HQ Security Officer (HQSO).

e. Portable computer equipment (laptops, PDAs, etc.) that is required for contractual work may be brought into the NATO HQ Administrative Zone, after they have undergone security checks.

f. Portable computer equipment that is required for contractual work may be brought into restricted areas, but are subject to a written approval from the HQ Infosec Officer (HQIO). They may be authorized under the following conditions:

- the equipment is absolutely necessary for the contractual work;
- the equipment is not equipped with a camera;
- all recording (e.g. voice) and transmission capabilities (e.g. Bluetooth, wireless technology e.g. IEEE 800.11x protocol, WiFi) have been switched off;
- the equipment is not connected to NATO HQ networks;
- the owner follows the instructions from HQ security officials; and
- the equipment may be subjected to security inspections.

g. Computer media (disks, CD/DVDs, USB sticks, etc.) used by contractor personnel at NATO HQ shall be clearly marked. Contractor personnel shall not use NATO HQ media unless this has been officially allowed in the contract.

h. Contractor personnel are not allowed to access NATO HQ computer networks.

i. Personal mobile phones and small personal radio/TV receivers and Walkmans/iPods are allowed into the Administrative Zone. They may not be used if they disturb in any way the activities of the NATO HQ Staff.

j. All other electronic equipment e.g. cameras, recording and transmission equipment, etc. are allowed into the Administrative Zone only if they are needed for the contract, subject to the agreement of the NATO Office of Security (NOS).

k. Cameras, recording devices (audio/video), mobile phones equipped with a camera, radio transmitters and laptops or PDAs fitted with cameras are not allowed inside restricted areas. Exceptions to this rule may be granted only by the NOS. In this circumstance the equipment will have to be cleared and officially marked.

15. ARBITRATION CLAUSE

a. In the event of a dispute, the parties shall attempt to settle their differences in an amicable manner; however, notwithstanding the foregoing, the parties agree to institute arbitration proceedings in the manner provided below.

b. The party instituting the arbitration proceedings shall advise the other party by registered letter, with official notice of delivery of his desire to have recourse to arbitration. Within a period of thirty days from the date of receipt of this letter, the parties shall jointly appoint an arbitrator. In the event of failure to appoint an arbitrator, the dispute or disputes shall be submitted to an Arbitration Tribunal consisting of three arbitrators, one being appointed by NATO, another by the other contracting party, and the third, who shall act as President of the Tribunal, by these two arbitrators. Should one of the parties fail to appoint an arbitrator during the fifteen days following the expiration of the first period of thirty days, or should the two arbitrators be unable to agree on the choice of the third member of the Arbitration Tribunal, within thirty days following the expiration of the said first period, the appointment shall be made, within twenty-one days, at the request of the party instituting the proceedings, by the Secretary General of the North Atlantic Treaty Organisation.

c. Regardless of the procedure concerning the appointment of this Arbitration Tribunal, the third arbitrator will have to be of a nationality different from the nationality of the other two members of the Tribunal.

d. Any arbitrator must be of the nationality of any one of the member states of NATO and shall be bound by the rules of security in force within NATO.

e. Any person appearing before the Arbitration Tribunal in the capacity of an expert witness shall, if he is of the nationality of one of the member states of NATO, be bound by the rules of security in force within NATO; if he is of another

nationality, no NATO classified documents or information shall be communicated to him.

f. An arbitrator who, for any reason whatsoever, ceases to act as an arbitrator, shall be replaced under the procedure laid down in paragraph 14.b above.

g. The Arbitration Tribunal will take its decisions by a majority vote. It shall decide whether it will meet and, unless it decides otherwise, shall follow the arbitration procedures of the International Chamber of Commerce in force at the date of the signature of the present contract.

h. The awards of the arbitrator or of the Arbitration Tribunal shall be final and there will be no right of appeal or recourse of any kind. These awards shall determine the apportionment of the arbitration expenses.

16.   USE OF NATO FOR REASONS OF REFERENCE

a. The use of the name of the NATO or of any NATO body by the supplier for reasons of reference must be authorized, on writing, by the Organization, after written request from the supplier. If any reference is made without preliminary NATO approval, immediate withdrawal should be done on a simple request by NATO.

b. Such authorisation, to be granted, will be subject to the following conditions to be accepted, on writing, by the supplier.

- The authorisation is limited to simply mentioning "NATO".

- Before permission to use its name for reasons of reference is given, the Organization requires final editorial approval of any material to which it refers and in which it is mentioned.

- The use of the NATO logo or any NATO body is excluded.

- The supplier agrees to the immediate elimination of any reference to NATO if required by the Organization by certified mail. This decision, when taken, must be considered as a firm one and it will be not subject to any appeal. Nevertheless, the Organization will make sure that the supplier knows the reasons leading to that decision.

c. Under no circumstance whatsoever permission to use NATO name for reasons of reference implies any kind of recommendation or endorsement of good/ services.

16.   VALIDITY OF CONTRACT

The validity of the contract or purchase order is contingent on signature by the Financial Controller IMS and the P&C Officer IMS (if contract value is higher than €39,000) on behalf of NATO and by the appointed representative of the Contractor

Spectrum Management Tools: SMIR-On-Line Tutorial

Statement Of Work

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INTRODUCTION

1.1. Scope of the document

This document defines the requirements for the development of an on-line course package and user manual concerning a web-based application called SMIROnLine (Spectrum Management Information Repository On Line) used by the NATO Spectrum Management (SM) community to exchange radio spectrum management data for military purposes. The results of all data exchanges are stored in a central database called SMIR (Spectrum Management Information Repository) maintained at NATO HQ.

All acronyms used in the document (except widely accepted ones) are expanded in paragraph 1.3. The SMIROnLine application is briefly described in paragraph 1.4, and the associated database SMIR in paragraph 1.5.

Additional Information

The website **http://nhqc3s.nato.int/smadef** contains additional information:

- Under menu "SMADEF-XML": the SMADEF-XML message exchange standard, version 3.0.1, used by SMIROnLine

- Under menu "ARCADE 4": ARCADE is the current system, which will be replaced by SMIROnLine; an on-line training for ARCADE exists, and interested bidders may look at this material using the login/password "sc3ib-icb" (same for password).

- Also under menu "ARCADE 4": A draft SMIROnLine user manual (PDF) is available.

1.2. Summary of the requested work, timelines, milestones

This Statement of Work is divided into 4 Work Packages (WP).

- WP1: Study of the subject web application and of the target e-learning platform (paragraph 3)

- WP2: Development of on-line Course Modules in English (paragraph 4).

- WP3: Development of a CD-ROM version of the Course in English (paragraph 5).

- WP4: Development of on-line help in English and French (paragraph 6).

Provisional timelines related to To = contract award date:

WP	Start	End
1	To	To + 2 months
2	To + 2 months	To + 8 months
3	To + 8 months	To + 9 months
4	To + 2 months	To + 9 months

Provisional milestones and payments:

#	WP	Key deliverable	Approx. Date	Payment
1.	-	Contract award	To	25%
2.	1	Review meeting (answer any remaining question on the target systems)	To + 2 months	-
3.	2+4	Intermediate review meeting	To + 4 months	25%
4.	2	Acceptance of WP2 draft modules and scripts	To + 6 months	25%
5.	2+3+4	Acceptance of WP2, 3 and 4 final products	To + 9 months	25%

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1.3. Glossary of Terms and Definitions

ARCADE	Allied Radio-frequency Computer Aided Data Exchange
ASP	Active Server Pages
DD	Data Distribution
FE	Force Element
FK	Foreign Key
CaP3	Civil/Military Spectrum Capability Panel
GUI	Graphical User Interface
HQ	Headquarters
IIS	Internet Information Services
JRFL	Joint Restricted Frequency List
LMS	Learning Management System
MINERVA	NATO HQ local area network
MS	Microsoft
NARFA	National Frequency Management Office
NHQC3S	NATO HQ C3 Staff
NSWAN	NATO Secure Wide Area Network
PK	Primary Key
RDBMS	Relational Database Management System
Rx	Receiver
SM	Spectrum Management
SMADEF-XML	Spectrum Management Allied Data Exchange Format, XML version
SC3IB	Spectrum & C3 Infrastructure Branch (part of NHQC3S)
SMIR	Spectrum Management information Repository (central SC3IB database)
SSPT	Spectrum Supportability
Tx	Transmitter

1.4. Tools Overview

NATO frequency assignments are recorded in a central database known as SMIR (Spectrum Management Information Repository). It is using an open source RDBMS called Firebird (www.firebirdsql.org) and is stored on a Windows 2003 Server, within NATO HQ C3 Staff (NHQC3S) premises. The Spectrum & C3 Infrastructure Branch (SC3IB) Staff uses this database in combination with other tools to engineer or to coordinate new frequency assignment requests.

Data concerning spectrum management functions must be exchanged between SC3IB Staff, National Staffs (NARFAs), and NATO Commands. The common format for this exchange is SMADEF-XML.

Currently these exchanges are prepared using a tool called ARCADE, a PC application dealing with the contents of frequency management messages; it allows the user to create, import and export SMADEF-XML messages and to generate database records from these messages.

ARCADE is distributed by SC3IB to Nations and NATO Commands. The overall ARCADE usage is summarised in the following figure:
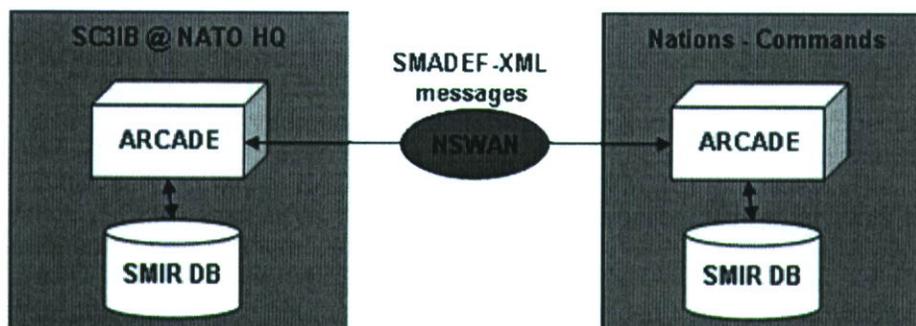

Figure 1: Overall ARCADE Interaction

The general architecture of ARCADE is shown below. The user interface of ARCADE is oriented towards the generation and reading/parsing of messages in the standard SMADEF format. ARCADE is also linked to the MRFL/SMIR database at NATO HQ, or a replica of this database (with partial data) for local users in the Nations.
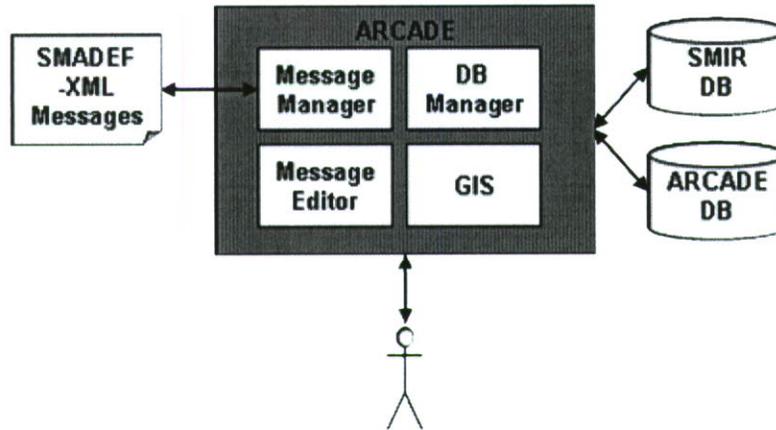
Figure 2: ARCADE Architecture

This ARCADE distributed application will be replaced by a central web-based application called SMIROnLine, hosted on a server at NATO HQ. The spectrum management related functions remain very similar to ARCADE, however the overall approach (business processes) is somewhat different due to the web-based solution.
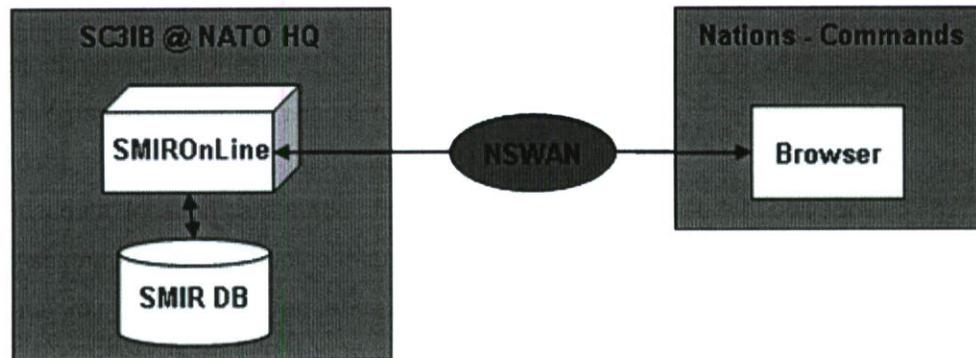

Figure 3: SMIROnLine Architecture

1.5. SMIR Overview

SMIR is a relational database supporting the storage of all SMADEF-XML data elements. The data may be categorised into 5 main categories:

- Administrative data (classification handling, points of contact, etc);

- Technical data: equipments and antennas, spectrum supportability;

- Geographical data: locations are made of fixed sites, polygons and sets of polygons;

- Allotment/Assignment data, including Interference Reports.

- Tactical data: Joint Restricted Frequency List (JRFL), Communications-Electronics Operating Instructions (CEOI), Force Elements description

A (very) simplified diagram containing the most important tables is shown below for information. The parent-to-child relations (foreign key (FK) with "on delete cascade" clause) are shown with black arrows, the peer-to-peer relations (FK with "on delete restrict" clause) are shown with red lines.
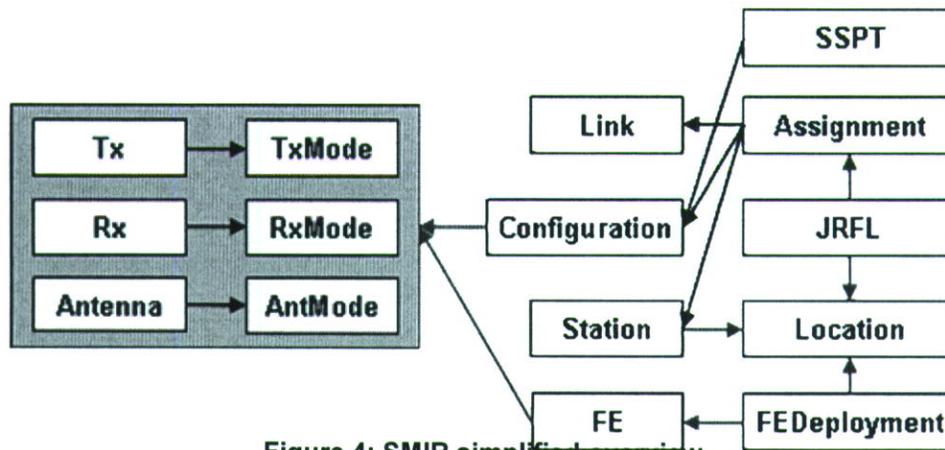
Figure 4: SMIR simplified overview

2. General Requirements

a) Bidders who are not already familiar with SC3IB business, SMADEF-XML and/or ARCADE may send at the start-up of the project their team to SC3IB so that SC3IB operators may "train the trainers".

b) The bid will contain the CV's and security clearance level of personnel for this project. Although the project is at an unclassified level, a NATO SECRET clearance will be required for staff entering or working at NATO premised.

c) All material will be developed in English; the on-line help will also be developed in French.

d) Tutorial content will be developed using as much as possible the Microsoft Office 2007 suite and Visio 2003. The on-line help will be developed using Help&Manual 5.4, which is already in use at SC3IB (and has been used to produce a first draft of the help). If other tools are necessary (Flash, etc), they will be identified in the bid and provided as part of the contract.

e) Each tutorial may be supported by videos and dynamic screen recordings (such as the videos produced with the open-source tool CamStudio).

f) An overall introduction will describe each module and the pre-requisites for each module.

g) Each tutorial module will be validated by a short quizz asking questions with multiple choices, concentrating on a few main issues from the module.

h) The course will be published on the NHQC3S web server (see section 2.2.1). The e-training framework used by SC3IB supports the sequencing of the content, constraining the learner to a fixed path through the training material, keeping track of his progress and recording his test scores.

i) The course should be compliant to the SCORM 2004 recommendation (Shareable Content Object Reference Model) in order to prepare its potential integration with other courses in the future. (SCORM is a specification of the Advanced Distributed Learning (ADL) Initiative, which comes out of the United States Department of Defense).

j) The course will be easy to maintain by a non-specialist Staff, as SC3IB will have to ensure the total maintenance and the update of the contents whenever a new version of SmirOnLine is released.

k) NATO will have the intellectual property rights on the delivered course contents and any home-made software tool.

l) The bid should have provisions for meetings at NATO HQ, or to provide travel and accommodation for NATO Staff at the bidder premises as best fitted depending on the course of the contract.

3.   WP1: Study of the existing material and infrastructure

3.1. NHQC3S web server

SC3IB tutorials are available as online eLearning, with users' auto-registration, recording of users' progress on the web server, etc. The tutorials will be published on a web server hosted at NATO HQ. This server currently runs Windows 2003 Server with Microsoft IIS6. It is currently hosting a mixture of websites developed in ASP / VBScript, and in ASP.Net with .Net Framework 2.0 and 4.0 and C#. The eTraining website uses ASP.Net with .Net Framework 2.0.

3.2. ARCADE and SMADEF-XML 1.2.2

This legacy application and exchange format are not the target of this course. However, a basic knowledge of their usage will help the contractor to understand the difference with the new system, and therefore to adapt the course modules taking into account that they must:

- Be self-sufficient and understandable for a newcomer without previous experience of ARCADE

- Help a former user of ARCADE to understand the different approach and business processes.

3.3. SMIROnLine and SMADEF-XML 3.0.1

The web application uses ASP.Net with .Net Framework 4.0. It may be made available to the bidder for installing on a company computer or server, or accessed via the Internet. A draft help manual in English already exists, but needs to be improved and expanded.

3.4. Deliverables

This working package will produce the skeleton of the course modules and of the user manual, to be accepted by SC3IB before the packages 2, 3 and 4 are started. As already explained the course must target both the newcomers (full course from basics to details) and experienced ARCADE users (explaining the differences ARCADE/SMIROnLine and SMADEF 1.2.2/3.0.1. An example of modules layout is shown below.

4.   WP2: Development of On-Line Course Modules

4.1. Objective

The exact modules and respective content will be designed during WP1. An example of modules layout may be:

- Introduction to NATO SM business processes

  Module introducing in a simple way the different business processes related to SM in NATO. Basically extracted from SMADEF-XML 1.2.2 Volume I (this information has not been ported to SMADEF-XML 3.0.1); XML technology, SMADEF-XML elements and structure; SMIR data model, relation with SMADEF-XML structure.

- Introduction to SMIROnLine

  Pre-requisites, connection, requesting a user account, user settings. Different types of users. Introduction to the different functions. Traduction of the SM business processes in terms of SMIROnLine functions.

- Detailed functions of SMIROnLine

  Dataset Manager; Dataset Editor, validation, processing to SMIR. Database Manager and Query Editor. Map functions. Engineering tools.

- Import/Export functions

4.2. Deliverables

a) Draft course modules in PowerPoint format, plus scripts for voice recording by the instructor;

b) Draft quiz tests;

c) Final modules and quizzes; modules including animations and voice recording will be compiled e.g. in Flash format.

5. WP3: CD-ROM version

5.1. Objective

The whole tutorial contents will be packaged on a CD-ROM as well as on the SMIROnLine website. The purpose is to distribute this CD-ROM to potential users who are coming to NATO HQ for meetings, hear something about the tools, and would like to have an overview without going to the full eLearning path. A simple packaging should allow the user to browse though the course modules. The CD should be self-sufficient (for example, it should contain Acrobat Reader / Flash Viewer as required and prompt the user to install them if necessary).

5.2. Deliverables

CD-ROM version of the WP3, including navigation between the modules. In this version, interactive quizzes are not mandated.

6. WP4: On-Line Help

6.1. Objective

The existing draft will be expanded and improved, to contain most of the information developed in WP2. Once the English version is agreed, the On-Line Help will also be translated into French. The help will be developed using Help & Manual 5.4 software tool.

6.2. Deliverables

a) On-Line help in English.

b) On-Line help in French.

c) In both cases, the internal hyperlinks (already implemented in the draft version) which are called from SMIROnLine to provide contextual help will be maintained.