

भारतीय दूरसंचार विनियामक प्राधिकरण TELECOM REGULATORY AUTHORITY OF INDIA भारत सरकार /Government of India



Ref. No. IT-2/3/4(2)/2021-IT

Tender for conducting the Security Audit for the following Portals by CERT-In empaneled agencies:

- (i) Header Information Portal https://smsheader.trai.gov.in
- (ii) Portal for Exemption from SMS Termination Charges https://smsheader.trai.gov.in/exemption/
- (iii) BCCMS Portal https://bccms.trai.gov.in
- (iv) MNRL Portal https://mnrl.trai.gov.in/



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No. IT-2/3/4(2)/2021-IT

Dated: 25th February, 2022

To

All CERT-In Empaneled Agencies

Sub: Tender for conducting the Security Audit for the following Portals by CERT-In empaneled agencies:

- (i) Header Information Portal https://smsheader.trai.gov.in
- (ii) Portal for Exemption from SMS Termination Charges https://smsheader.trai.gov.in/exemption
- (iii) BCCMS Portal https://bccms.trai.gov.in
- (iv) MNRL Portal https://mnrl.trai.gov.in/.
- 1. The Telecom Regulatory Authority of India (TRAI) was established with effect from 20th February 1997 by an Act of Parliament, called the Telecom Regulatory Authority of India Act, 1997, to regulate telecom services, including fixation/revision of tariffs for telecom services which were earlier vested in the Central Government. The Website of TRAI is https://trai.gov.in. The TRAI is presently located at Mahanagar Doorsanchar Bhawan (next to Zakir Hussain College), Jawaharlal Nehru Marg (Old Minto Road), New Delhi: 110 002.
- 2.1 The Header Information Portal facilitates Customers to know the sender of Commercial and Government awareness communications. This portal may also help other principal entities to check whether any look-alike header is registered by any other entity. Anyone can query a particular header or download the complete list. TSPs can upload the list of alpha-numeric headers assigned to Principal Entities (Business or legal entities). The portal is presently available at https://smsheader.trai.gov.in.
- 2.2 This Portal facilitates Government entities to online apply for the exemption from SMS termination charges up to 5 paisa for registered headers under Regulation 35 of TCCCPR, 2018. This portal also help Government entities to know about the renewal dates and other information related 5 paisa exemption. The portal is presently available at https://smsheader.trai.gov.in/exemption.
- 2.3 This portal is being used for uploading various complaints received in TRAI through letters/emails/phone calls against respective service providers in Broadcasting Domain. The portal facilitate TRAI to forward the complaint received at

Signature of the EB with Seal

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TRAI to service providers. To monitor the action taken by the service providers, the complaint is digitize the manual process and bringing transparency and efficiency. The portal is presently available at https://bccms.trai.gov.in.

- 2.4 MNRL portal is a platform where respective TSPs can submit the list of permanently disconnected mobile numbers. The stakeholders like banks can download MNRL and clean up their databases by using their own workflows (for example, a bank could download the list, check each number and if it is one of their customers', then can flag it, and let the customer update it with his new number). The stakeholders thereby shall not send one-time password etc. to someone other than their customer. This will help those customers, who may either not be using the concerned services regularly and hence do not find a reason to update their mobile number, or due to lack of awareness of potential danger due to mobile number reuse on re-allocation of a mobile number to other person/entity. The portal is presently available at https://mnrl.trai.gov.in/.
- 3. Sealed Bids are invited on behalf of TRAI from CERT-In Empaneled Agencies for Security audit for the above portals.
- 4. The bids duly filled in all respect enclosing necessary documents may be addressed to, **The Senior Research Officer-IT**, **Telecom Regulatory Authority of India**, Mahanagar Doorsanchar Bhawan (next to Zakir Hussain College), Jawaharlal Nehru Marg (Old Minto Road), New Delhi: 110 002, so as to reach on or before **21.03.2022 till 15:00 hrs.**
- 5. The bids will be opened on the same date **i.e. 21.03.2022 at 15:30 Hrs** at TRAI, New Delhi in the presence of bidders who may wish to be present, either by themselves or through their authorized representatives.
- 6. The detailed Terms & Conditions as **Annexure-I**, Scope of Work as **Annexure-II**, Format for submitting Price bid as **Annexure-III** and Bidder Details as **Annexure-IV** are attached with this tender document and can be downloaded from TRAI website www.trai.gov.in.

Senior Research Officer (IT)
Dated: 25/02/2022

TERMS & CONDITIONS

1. The SMS portal is to be hosted at NIC server so the security audit certificate should be in compliance with the NIC standards. The bidders may well acquaint themselves with NIC standards before applying for tender. The other two portals will be hosted on aws cloud.

2. Eligibility Criteria:

- a. The bidder must be an empaneled auditor of CERT-In, having a valid empanelment certificate. Copy of the valid CERT-In empanelment certificate needs to be furnished.
- b. Documentary evidence of firm's GST Registration shall be furnished. Bids not satisfying the above eligibility criteria / not accompanied by the requisite documentary proofs shall be rejected.
- 3. The bid shall contain one sealed cover envelope super-scribed as, "Bid for Security Audit of SMS Portal/SMSheader / BCCMS portal & MNRL portal".
- **4.** All pages of the bid being submitted must be signed with official seal.

5. Period of Bid Validity

Bids shall remain valid for 90 days from the date of Bid Opening. Any Bid valid for a shorter period than the period specified shall be rejected as non-responsive.

6. Last date & Time for receipt of Bids:

The last date for receipt of Bids is 21st March, 2022 till 15:00 Hrs. Bids will be opened on the same day at 15:30 Hrs.

7. Submission of Bids:

The completed bids may be submitted in person or alternatively the bids may be sent by registered post/speed post to **The Senior Research Officer-IT**, **Telecom Regulatory Authority of India**, Mahanagar Doorsanchar Bhawan (next to Zakir Hussain College), Jawaharlal Nehru Marg (Old Minto Road), New Delhi: 110 002 so as to reach by the time and date stipulated for receipt of Bid.

8. Late Bid

Any delay, including postal delay, in the receipt of bid would be treated late submission of bid and shall be rejected. Bids handed over at the Reception Counter or any other counter or room or to any person, other than the authorized person of TRAI, shall not be considered.

Signature of the EB with Seal

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9. Language of Bids

The Bids prepared by the Bidder and documents relating to the bids exchanged by the Bidder and TRAI, shall be written in the Hindi/English language, provided that any printed literature furnished by the Bidder may be written in another language so long as the same is accompanied by an Hindi /English translation in which case, for purposes of interpretation of the bid, the Hindi/English version shall govern.

10. Bid Prices

- a) The prices shall be quoted in Indian Rupees only.
- b) All taxes, duties, levies applicable etc. shall be clearly indicated.
- c) Prices quoted must be final and shall remain constant throughout the period of validity of bid and shall not be subject to any upward modifications, whatsoever.
- d) Bidders shall indicate their rates in clear/visible figures as well as in words and shall not alter/overwrite/make cutting in the quotation.

11. Bid Evaluation

- a) During Eligibility Criteria Evaluation, bidder's details shall be evaluated with reference to the required Eligibility Criteria as mentioned in this tender document and subsequently the bids of only eligible bidders shall be considered for final evaluation.
- b) The price bids shall be evaluated as under:
 - i) If there is any discrepancy between words and figures, the amount in words will prevail.
 - ii) If the Bidder does not accept the correction of the errors as above, the bid shall be rejected.
- c) The bidder whose evaluated price is found to be lowest (L-1), shall be considered for award of contract for Conducting Security Audit of TRAI Website.

12. Payment Terms:

- a. Payment will be released after successful completion of work, submission of necessary certificate /documents / Report to TRAI and receipt of prereceipted bills in triplicate.
- b. No advance payment shall be made.
- c. No claim on account of any price variation / escalation shall be entertained.
- d. No claim for interest in case of delayed payment will be entertained by the Authority.

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13. TRAI's right to accept or reject any or all bids

TRAI reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to Award of Contract without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds.

14. Force Majeure

- a) "Force Majeure" means an event beyond the control of the Auditor and not involving the Auditor's fault or negligence and not foreseeable. This type of event may include but not limited to fires, explosions, floods, earthquakes, strikes, wars or revolutions etc.
- b) The work execution period may be extended in case of Force Majeure condition. In order to be able to obtain an extension to the contract work period, the Auditor shall promptly notify auditee advising the existence of such an event, not later than one week of such event happening and produce the necessary documents such as Certificate of Chamber of Commerce or any other competent authority indicating the scope of such an event, and its impact on the performance of the contract and establish that such an event is not attributable to any failures on its part.
- c) Laws governing contract: The contract shall be governed by the laws of India for time being in force.
- d) **Jurisdiction of courts:** The courts of Delhi shall alone have the jurisdiction to decide any dispute arising out of or in respect of the contract.

15. Arbitration:

In the event of any dispute arising out of this notice inviting tender or any agreement arising therefrom or any matter connected or concerned with the said agreement in any manner of its implementation or any terms and conditions of the said agreement, the matter shall be referred to Secretary, TRAI, who may himself act as sole arbitrator or may nominate an officer of TRAI as sole arbitrator, notwithstanding the fact that such officer has been directly or indirectly associated with the agreement. The bidder/ auditor will not be entitled to raise any objection for the appointment of such officer of TRAI as the sole arbitrator. The award of the arbitrator shall be final and binding subject to the provisions of the arbitration and conciliation Act, 1996 and rules made thereunder. The seat of arbitration shall be New Delhi and the language of arbitration shall be in English only.

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Scope of Work for the Security Audit

TRAI has a web application portal with its **URL** https://smsheader.trai.gov.in, https://smsheader.trai.gov.in/exemption https://bccms.trai.gov.in. and https://mnrl.trai.gov.in/. The portal is presently hosted on AWS Server and shall be hosted on NIC Cloud server after security audit.

- 1. The Auditor is expected to carry out an assessment of the vulnerabilities, threats and risks that may exist in the above web application portals through Internet Vulnerability Assessment and Penetration Testing which includes identifying remedial solutions and recommendations for implementation of the same to mitigate all identified risks, with the objective of enhancing the security of the website.
- 2. The website/portals audit should be done by using Industry Standards and as per the Open Web Application Security Project (OWASP) methodology.
- 3. During Security Audit, if any lapse is found, the same shall be reported by the auditor to TRAI to make the application/portal fully secured for hosting on NIC server.
- 4. The audit of the application/portal should be conducted in conformity with NIC audit guidelines. After successful security audit of the website, the security audit report from the auditor should clearly state that all web pages along with respective linked data files (in pdf / doc / xls etc. formats), all scripts and image files are free from any vulnerability or malicious code, which could be exploited to compromise and gain unauthorized access with escalated privileges into the webserver system hosting the said website.

5. Audit Environment:

The URLs of portals which needs to be audited is as follows:

- (i) Header Information Portal https://smsheader.trai.gov.in
- (ii) Portal for Exemption from SMS Termination Charges https://smsheader.trai.gov.in/exemption
- (iii) BCCMS Portal https://bccms.trai.gov.in
- (iv) MNRL Portal https://mnrl.trai.gov.in/

The Selected Auditor Supply/ installation of auditing / testing tools, if any, for the audit purpose will be liability of the auditor.

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6. Responsibilities of Selected Auditor:

The Selected Auditor will conduct security Audit for the Portals https://smsheader.trai.gov.in, https://smsheader.trai.gov.in/exemptionhttps://bccms.trai.gov.in. and https://mnrl.trai.gov.in/ as under:

- i. Verify possible vulnerable services, only with explicit written permission from TRAI.
- ii. Notify TRAI whenever there is any change in auditing plan / source test venue / high risk findings or any occurrence of testing problem.
- iii. Responsible for documentation and reporting requirements for the audit.
- iv. Task-1: Web Security Audit/Assessment.
- v. Task-2: Re-audit based on recommendation report of Task-1.
- vi. On successful security audit, furnish certificate for the website as per NIC norms stating that the application/ website is safe for hosting on the NIC server.

7. Audit report.

The Auditor shall submit a report indicating about the vulnerabilities as per OWASP and recommendations for action after completion of Task-1. The final formal IT security Audit Report should be submitted by the Auditor after the completion of all the tasks of Audit. The reports should contain:

- i. Identification of auditee (address & contact information).
- ii. Dates and locations(s) of audit (Task-1 and Task-2)
- iii. Terms of reference (as agreed between the auditee and auditor), including the standard for audit, if any.
- iv. Audit Plan.
- v. Explicit reference to key auditee organization documents (by date or version) including policy and procedure documents, if any.
- vi. Additional mandatory or voluntary standards or regulations applicable to the auditee.
- vii. Summary of audit findings including identification tests, tools used, and results of tests performed.
- viii. Analysis of vulnerabilities and issues of concern.
- ix. Recommendations for action.
- x. Personnel involved in the audit, including identification of any trainees. In addition to this, reports should include all unknowns clearly marked as unknowns.

8. Responsibility of TRAI

i. The auditor will submit the vulnerability report to TRAI who will be responsible to remove vulnerabilities if any, which are identified by the auditor. After removing the vulnerabilities, TRAI will send confirmation to the

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- auditor stating that the vulnerabilities have been removed as mentioned by the auditor.
- ii. The second round of audit shall be conducted by the auditor after removal of such vulnerabilities by TRAI.
- iii. TRAI will refrain from carrying out any unusual or major changes during auditing / testing. If necessary, for privileged testing, the auditee can provide necessary access to the Auditor as mentioned in the clause 'Audit Environment' above.

9. Confidentiality

All documents, information and reports relating to the assignment would be handled and kept strictly confidential and not shared/published/supplied or disseminated in any manner, by the Auditor

10. Technical Details of the applications are as follows:

i) SMSheader Portal:

S.	Parameters/Information about the	Description
No	Portal	•
1	Web application Name & URL	HIP Portal: _
		https://smsheader.trai.gov.in
2	Operating system details (i.e. windows - 2003, Linux, AIX, Solaris etc.,)	RHEL 8.2
3	Application Server with Version (i.e. IIS 5.0. Apache, Tomcat, etc.)	Tomcat 9, JAVA 11
4	Front end Tool [Server-side Scripts] (i.e. ASP, Asp.NET, JSP, PHP, etc.)	Java, JSP
5	Back end Database (MS-SQL Server, PostgreSQL, Oracle, etc.)	PostgreSQL
6	Authorization No. of roles & types of privileges for the different roles	 TRAI – Can view status for all TSPs TSP – Can upload and view their own data/reports. User- Can view Header details.
7	Whether the site contains any content management module (CMS) (If yes then which?)	No
8	No of input forms	10 (for upload, view, editing, login etc)
9	No. (Approximate) of input Fields	30-35
10	No. of login modules	2 (TRAI Login & TSPs Login)
11	Is there any payment gateway?	No
_12	Number of Web Services, if any	0

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ii) Portal for Exemption from SMS Termination Charges

S. No	Parameters/Information about the Portal	Description
1	Web application Name & URL	SMS Exemption Portal: _ https://smsheader.trai.gov.in/ex emption
2	Operating system details (i.e. windows - 2003, Linux, AIX, Solaris etc.,)	RHEL 8.2
3	Application Server with Version (i.e. IIS 5.0. Apache, Tomcat, etc.)	Tomcat 9, JAVA 11
4	Front end Tool [Server-side Scripts] (i.e. ASP, Asp.NET, JSP, PHP, etc.)	Java, JSP
5	Back end Database (MS-SQL Server, PostgreSQL, Oracle, etc.)	PostgreSQL
б	Authorization No. of roles & types of privileges for the different roles	 TRAI – Can view status, reports and provide exemption. Govt Entities – Can apply/upload header detail and view their own data/reports.
7	Whether the site contains any content management module (CMS) (If yes then which?)	No
8	No of input forms	16
9	No. (Approximate) of input Fields	160-180
10	No. of login modules	2 (TRAI Login & Govt Entities Login)
11	Is there any payment gateway?	No
12	Number of Web Services, if any	1

iii) BCCMS Portal

S. No	Parameters/Information about the Portal	Description
1	Web application Name & URL	BCCMS Portal: _ https://bccms.trai.gov.in
2	Operating system details (i.e. windows - 2003, Linux, AIX, Solaris etc.,)	RHEL 8.2

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3	Application Server with Version (i.e. IIS 5.0. Apache, Tomcat, etc.)	Tomcat 9, JAVA 11
4	Front end Tool [Server-side Scripts] (i.e. ASP, Asp.NET, JSP, PHP, etc.)	Java, JSP
5	Back end Database (MS-SQL Server, PostgreSQL, Oracle, etc.)	PostgreSQL
6	Authorization No. of roles & types of privileges for the different roles	1. TRAI – Can lodge and view the status/reports for all complaints 2. SP – Can update action taken and view their own data/reports.
7	Whether the site contains any content management module (CMS) (If yes then which?)	No
8	No of input forms	18
9	No. (Approximate) of input Fields	100-120
10	No. of login modules	2 (TRAI Login & SPs Login)
11	Is there any payment gateway?	No
12	Number of Web Services, if any	0

iv) MNRL Portal

S. No	Parameters/Information about the Portal	Description
1	Web application Name & URL	MNRL Portal: _ https://mnrl.trai.gov.in/
2	Operating system details (i.e. windows - 2003, Linux, AIX, Solaris etc.,)	RHEL 8.2
3	Application Server with Version (i.e. IIS 5.0. Apache, Tomcat, etc.)	Tomcat 9, JAVA 11
4	Front end Tool [Server-side Scripts] (i.e. ASP, Asp.NET, JSP, PHP, etc.)	Java, JSP
5	Back end Database (MS-SQL Server, PostgreSQL, Oracle, etc.)	PostgreSQL
6	Authorization No. of roles & types of privileges for the different roles	1. TRAI – generate MNRL (pdf,excel,json)and view the status/reports 2- TSP (company secretary)- to create TSP user 3. TSP user – Can upload MNRL and view the status.

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7	Whether the site contains any content management module (CMS) (If yes then which?)	No
8	No of input forms	12
9	No. (Approximate) of input Fields	25-30
10	No. of login modules	3 (TRAI Login, TSP CS & TSPs user Login)
11	Is there any payment gateway?	No
12	Number of Web Services, if any	1

11. Deliverables and Audit Reports:

The successful bidder will be required to submit the following documents in printed format (2 copies each) after the audit of above-mentioned web application:

- i. A detailed report with security status and discovered vulnerabilities weakness and misconfigurations with associated risk levels and recommended actions for risk mitigations.
- ii. Summary and detailed reports on security risk, vulnerabilities and audit with the necessary counter measures and recommended corrective actions to be undertaken by TRAI.
- iii. The final security audit certificate for and should be in compliance with the NIC standards.
- iv. All deliverables shall be in English language and in A4 size format.
- v. The vendor will be required to submit the deliverables as per terms and conditions of this document.

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(On Company Letter Pad)

То

The Senior Research Officer-IT, Telecom Regulatory Authority of India, Mahanagar Doorsanchar Bhawan (next to Zakir Hussain College), Jawaharlal Nehru Marg (Old Minto Road), New Delhi: 110 002

Subject: Financial Bid for conducting Security Audit of smsheader.trai.gov.in, smsheader.trai.gov.in/exemption, bccms.trai.gov.in. and mnrl.trai.gov.in.

 $\it I/We$ hereby submit the financial bid for conducting security audit of CMS Portal as per the tender document: -

	Description of Work	Amount (Rs.)
Secu (i) (ii) (iii) (iv)	Header Information Portal https://smsheader.trai.gov.in Portal for Exemption from SMS Termination Charges https://smsheader.trai.gov.in/exemption BCCMS Portal https://bccms.trai.gov.in MNRL Portal https://mnrl.trai.gov.in/.	
Taxe	es (specify) (%)	
	Grand Total	
	ees in words (Rupees	
<u>Note</u> : (a) (b)	The Financial Bid shall contain nothing else but Prices Bidders are requested to ensure that after quoting the priduly signed with company seal. Financial bid submitted company seal will not be accepted / considered .	ces this Annexure is
Date_		
	Signature:	
	Name:	·
	Designation:	
		Company Seal

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Signature of the EB with Seal

5. Jane 1.

ANNEXURE-IV

BIDDER'S PARTICULARS

S.No	Particulars	Details
1	Name of the Bidder	
2	Full Address of the Bidder	
3	Name of the Authorized Signatory	
4	Name & address of the officer to whom all references shall be made regarding this tender	
5	Telephone	
6	Fax No.	
7	E-mail	
8	Mobile	

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Name:

Designation:

Company Seal

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s. Lane M.