

## Technical Specifications

<b>Purpose:</b>	Provision of the services for the development of web-platform <a href="http://www.fiireponsabil.md">www.fiireponsabil.md</a> (including IOS and Android applications – of the platform) which will serve as a tool for the citizens to report about shadow economy irregularities (currently, fiscal and consumer rights violations) directly to the responsible public institutions
<b>Duration:</b>	50 days from the signing of the contract
<b>Category of requirements</b>	Detailed description of technical requirements
<b>URL address</b>	<a href="http://fiireponsabil.md">http://fiireponsabil.md</a>
<b>Requirements related to graphic style</b>	The graphic style and the visual concept of the site should be in line with the profile of a social portal.
<b>Requirements related to accessibility</b>	The site should be accessible for all categories of users, including: <ul style="list-style-type: none"> <li>• with the range of colors of minimum 16 bytes;</li> <li>• with the minimum resolution 1024 x 768;</li> <li>• Using the PC platform, and as explorer – the last versions of Internet Explorer 11+, Mozilla FireFox, Google Chrome.</li> </ul>
<b>Mobile applications of the platform</b>	There will be developed two specific versions for mobiles: Android and IOS with reduced functionalities, necessary for ensuring the users with the range of tools to create reports and monitor reporting status
<b>Requirements for site design</b>	<p>The design of the site FIIRESPONSABIL.md should ensure:</p> <ul style="list-style-type: none"> <li>• efficient posting of information of different nature</li> <li>• efficient access to site content for users with different levels of IT skills</li> <li>• intuitive access to site functionalities</li> <li>• rapid search of relevant information</li> <li>• A logical presentation of the site structure and content, using different types of monitors and resolutions.</li> </ul> <p>The design of the site should be developed, using a combination of colors and styles attractive for the eyes. The focus should be mainly on graphic elements. Hypertext references should be placed to the sponsors' web-sites. To switch between the available linguistic versions, hypertext references will be used with suggestive text: Română, Русский. The switch from one linguistic version to another to be possible by changing the linguistic version with the help of hypertext references. The main page of the site should be elegant, balanced and intuitive for understanding the principles of access to the site resources.</p>
<b>Requirements regarding the software platform</b>	<p>The operation system: solution portable on UNIX compatible platform and Windows compatible platform;</p> <ul style="list-style-type: none"> <li>• Programming language: Java 7/8</li> <li>• Database management system: PostgreSQL 9.4+</li> </ul> <p>WEB Server: Apache Tomcat 8</p> <p>Supplier of the services can offer the technology at his discretion.</p>

<b>Business processes of the information system</b>	<p><b>1. Map. Display and management of maps 5</b></p> <p>The map should cover not less than 70% of the page. It is important for the map to be rapid (including with the use of map images cache). The users will see the quantity of reporting on the map grouped by neighboring and address criteria. When pushing the quantity of reporting, it is necessary to display a window which would include detailed information on reporting with the possibility to select their full view.</p> <p><b>2. Administration of users/roles/categories</b></p> <p>The administrator will have a set of mechanisms necessary for adding/deleting/changing users, roles and categories within an interface for which only the administrator will have the access right</p> <p><b>3. Administration of reporting</b></p> <p>The administrator will have the possibility to view the reporting sent by users. Subsequently, if the administrator decides that the information is not false, he/she should have the possibility to approve the reporting and to refer it to those who are responsible to take the necessary measures (tax bodies or consumers' protection). The referral implies the notification of the responsible bodies via mail, sending as well detailed information about the person who has concluded the reporting (including personal data). It is important that the administrator should not have the right to view personal information. The referral should be designed in two types: a) manual referral – selecting the mail address or the responsible person whom to refer the reporting b) automated referral – a set of predefined rules according to which the system will send the information automatically.</p> <p><b>4. Users' authentication</b></p> <p>The system should have the possibility to divide the information viewing depending on the users' roles after authentication. The authentication may be of two types:</p> <ul style="list-style-type: none"> <li>a) MPASS authentication</li> <li>b) simple authentication or authentication through Facebook, Google accounts, and other</li> </ul> <p><b>5. Reporting violations</b></p> <p>The reporting of violations is created by the authenticated user in the system. He/she will have the possibility to select the category to refer the violation to (according to the classifier of categories) and the location where the violation was identified. The location may be selected in two modalities a) by stipulating the address of the violation location b) by selecting on the map the location of the violation. As soon as the violation is saved in the system, the administrator will have the possibility to validate it and to send it for verification to the responsible people. The responsible person for verification will have maximum 5 days to verify and take the necessary measures regarding the violation. The system will warn the responsible person automatically about the expiry of the deadline set for verification one day before the expiration of such deadline. The administrator will be warned upon expiration.</p> <p>The person responsible for verification should have an interface through which he/she will modify the status of the reporting and to introduce the necessary comments (other identified important information). The publication of the reporting status is automatic, hence the users in real regime will have the possibility to view the status of the violation.</p> <p>The users will be informed automatically through email about the modification of the status of the violation introduced by them.</p> <p><b>6. Monitoring violations</b></p> <p>The monitoring of the violations shall be in two regimes:</p>
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	<p>Manual monitoring: the administrator and the person responsible for verification will have the possibility to view the list of violations and the detailed information about violations, as well as the date when the violation was sent and the deadline for verification.</p> <p>Automated monitoring: provides for monitoring and notification regarding the expiration of the deadline set for verification of the violation in automated regime according to a predefined set of rules.</p> <p><b>7. Response to identified violations</b></p> <p>The person responsible for verification of the violations shall verify and introduce the resolution and the measures taken regarding the identified violation. To do this, he/she will have an interface where to respond to the identified violations.</p> <p><b>8. Grouping/Viewing reporting statistics</b></p> <p>The information system should have a specific reporting system depending on the users' role. These reports will be discussed in detail during the technical description of the information system</p> <p><b>9. Notification about receiving the new reporting</b></p> <p>The system provides for automated notification about receipt of a new violation – of the administrator and/or the person responsible for verification of violations. Notification is performed via email and will have a standard template discussed during the development of the system.</p> <p><b>10. Notification about the undertaken sanctions</b></p> <p>The user will be notified automatically through email about the sanctions undertaken in relation to the violation sent by him/her.</p> <p><b>11. Social projects. Voting.</b></p> <p>The information system</p> <ul style="list-style-type: none"> <li>a) will have an interface to introduce various social projects</li> <li>b) will allow the logged users to vote a certain project</li> <li>c) will ensure with statistics and reports on voting</li> </ul>
<p><b>Requirements regarding the Content Management System (CMS)</b></p>	<p>The content of the site Fiirensponsabil.md will be administrated through a Content Management System (CMS) with a friendly interface in Romanian and/or English.</p> <p><b>The Content Management System</b> should have mechanisms for setting the principles for users' authorization, as well as their rights and roles. Hence, it should be possible to share the competences for administration of site's compartments among distinct users.</p> <p><b>The Content Management System</b> of the Fiirensponsabil.md site should provide the administrators with a number of facilities, the most important ones being the following:</p> <ol style="list-style-type: none"> <li>1. Ensuring the possibility to administrate the site structure. <ul style="list-style-type: none"> <li>• There should be a possibility to define and administrate dynamically the structure of the site. There should be possible to define (create / modify / remove / reorganize) structural categories and subcategories. As well, there should be the visual possibility to set the rules for presentation and administration of the options under the general navigation menu.</li> </ul> </li> <li>2. Ensuring the possibility to set the main page. <ul style="list-style-type: none"> <li>• displaying/hiding the menu options;</li> <li>• displaying/hiding the available linguistic versions;</li> <li>• displaying/hiding the categories of violations/irregularities;</li> </ul> </li> </ol>

- defining / hiding / deleting the attributive information posted on the map;
  - the possibility to remove and change the sizes
3. Ensuring the mechanisms for editing the content.
    - the possibility to edit through exclusively visual means the content of any page from the site (it would be nice to ensure the possibility to take over the text from MS Word or to format it through an interface close to that of MS Word);
    - availability of the regime to enter the content: introduction of standard HTML page (integral content of the document is on another HTML page).
  4. Ensuring the possibility to post reports about violations and to manage them.
    - visitors will have the possibility to post reports about the identified irregularities (in categories predefined by the administrator)
    - the administrator will have the possibility to activate/deactivate every category of violations, the possibility to activate/deactivate the reports sent by users (the predefined option to post the report will be active);
    - the responsible for categories (Tax Inspectorate, Consumers' Protection Agency) will read the comments through the Content Management System and will answer, change the status of reporting;
    - the administrator will have the possibility to add or remove from the black list certain IP addresses from which it will not be possible to post any reporting anymore.
  5. Ensuring the possibility to view the site visits statistics
    - displaying internal statistics of the site: daily, weekly, or as agreed.
    - viewing the aggregated internal statistics by used navigators, countries, etc.;
    - existence of a system assessing the rating of the documents published on the server
    - implementation of the Google statistical mechanism (Google analytics)
  6. Ensuring the mechanisms for administrating the users of the Content Management System.
    - adding/editing-removing the accounts of the users with the right to administrate the site content;
    - restricting the access of users to the functionalities of the Content Management System or site compartments (defining the roles and the rights for every user separately).
  7. Ensuring the possibility to administrate the meta-data for the site pages.
    - <meta name="Title" (the value will be taken over automatically from the title of the document);
    - <meta name="Description";
    - <meta name="KeyWords"
  8. The content of the site will be saved in UNICOD format (UTF-8), and this will allow displaying in a combine way the text in Latin and Cyrillic.

<b>Requirements for users' authentication</b>	<p>The users will have two possibilities of authentication:</p> <ol style="list-style-type: none"> <li>1. MPASS authentication</li> <li>2. Simple authentication or authentication through Facebook, Google accounts and other.</li> </ol>
<b>Requirements for searching information</b>	<p>The site will have an internal mechanism for searching the information (reporting). The Internet users will be able to formulate search criteria, while the search engine will display the results according to their relevance to the search criterion.</p>
<b>Requirements for ensuring the quality of the delivered solution</b>	<p>To test the product, there will be used navigation and access techniques from different types of computers and Internet explorers. As well, there will be tested the compatibility of the interface with the most popular explorers (MS Internet Explorer, Mozilla FireFox, Google Chrome). There will be also tested the public interface regarding the intuitive nature of its use by different groups of Internet users.</p> <p>Testing will be used for the mobile versions Android and IOS in relation to their interface and specific functionalities.</p>
<b>Requirements for the eventual structure of the site</b>	<p><b>Rapid links</b></p> <ul style="list-style-type: none"> <li>• The first page</li> <li>• Reporting</li> <li>• Administration</li> <li>• Personal page</li> <li>• Contacts</li> </ul> <p><b>Reporting</b></p> <ul style="list-style-type: none"> <li>• Adding a report</li> <li>• Searching a report</li> <li>• Viewing a report</li> <li>• Statistics on reporting</li> </ul> <p><b>Administration</b></p> <ul style="list-style-type: none"> <li>• Users/Roles</li> <li>• Administration of categories</li> <li>• Administration/Monitoring of reports</li> <li>• Administration of the map</li> </ul>
<b>Requirements for the training of the responsible persons on the usage of the platform</b>	<p>The contractor should provide a training session for the persons responsible for the usage of the platform</p>
<b>Requirements for duration of performing the task</b>	<p>The web-platform <a href="http://www.fiireponsabil.md">www.fiireponsabil.md</a> should be launched within maximum 50 days since the moment the contract for site development service provision is signed.</p>