

TECHNICAL SPECIFICATION
for renewing the
Content Management System, CMS
for the web page web www.cec.md

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1. Introduction

The site content management tool is a web-software system created for full automation of the web page content management. It is ensured by a centralized administration panel, aimed to allow rapid and easy execution of site management operations.

At the same time, the Content Management platform should be designed by general modules, which would be configured according to the specific structure of the page web www.cec.md.

2. Task

In this respect, it is suggested to modernize the existing Content Management System (CMS), meant to be used by users with knowledge of operator, editor familiarized with Microsoft Windows, Office, Internet Explorer, Mozilla FireFox, etc.. This should lead to a simplistic handling of the web page.

At the same time, the CMS should be updated:

- a) to allow creating/setting menus with submenus in more levels (from 3 levels);
- b) to allow, through drag-and-drop, adding/modifying/deleting/changing the position/migration/activation/deactivation of blocks, menus and sub-pages in the existing sections of the site;
- c) to allow adding/deactivating more linguistic versions of the site:
 - a. RO – Română;
 - b. RU – Русский;
 - c. EN – English;
 - d. FR – Francaise;
- d) through the administration panel, to provide the simplified possibility to create roles for users with selected permissions. Hence, when creating a new role, to have the possibility to select (by checking) the permissions for viewing, creating/modifying, publishing or deleting the content typology of the information, as well as to manage its functional modules;
- e) to allow a tool for increasing/decreasing the web page, meant for persons with eyesight deficiencies;
- f) the implementation of the requested modifications should not affect the structure, connections, and content of the existing page www.cec.md. ; minor changes are admitted in the design of the current page.

3. General considerations

The changes regarding the improvement of the CMS for the cec.md page should not affect the structure and the design of the site. The administration module should meet the following requirements described further on:

- a) It is necessary for CMS to be functional and to be identically displayed on the following web navigators:
- Microsoft Internet Explorer 8, 9 , 10
 - Mozilla Firefox for operation systems: Linux , Windows, MacOS
 - Google Chrome for operation systems: Linux, Windows, MacOS;
 - Safari for operation systems: MacOS, Windows;

 - Opera for operation systems: Windows, MacOS;

 - Built-in browsers for operation systems Android, iOS, Windows Phone OS, Tablets (iOS, Android, Windows).
- b) the HTML code and CSS should be valid according W3C;
- c) to edit the texts, a **wysiwyg** type text editor should be used (What- You-See-Is-What-You-Get) which allows formatting the text and its appearance on the page of the module in which it is introduced;
- d) suggestive names and icons will be used to display the main actions;
- e) the technologies used for developing the CMS will be of open source type;
- f) for a correct display of the CMS also on mobile devices, the interface should be built using the *Responsive Design Methodology* (RDM);

4. Business model

a. *Simple interface*

It will allow for simplistic use of the web interface to create and edit compartments of pages.

b. *Content editing*

Simplistic editing of the content in *Microsoft Office style* editor:

- Direct editing on the page by clicking the compartment to be edited, or by selecting it and editing it using the edit button;
- There should exist the possibility/support for verifying the text (spelling in English, Romanian, Russian, and French);

c. *Flexibility of the web page design*

Creation of sub-sites without the need to have advanced knowledge in programming (PHP, CSS etc.), just using some existing design templates.

- Modification of design elements without advanced knowledge in IT (design templates, etc.);
- Creation of sub-pages with minimum effort;
- The sub-sites will be a clone of the main system, but will benefit from their own interface and administration.
- The sub-sites' modules will be identical with the system they are created from.

d. *Multilingual support*

Creates and provides the possibility to manage the page in Romanian, Russian, English.

- Provides possibilities to activate/deactivate simply the linguistic versions (rom rus eng).
- As well, the possibility/support to verify the text (spelling in English, Romanian, Russian, French);

e. *Data management*

- Simple management of site's data (text, image, video, doc, PDF, etc.) by using the "drag-and-drop" mechanism on the web page in the necessary compartments.
- Organization and effective use of digital assets;
- Use of existing metadata and data;
- Preserving the mechanism of interaction with the existing portal *on-line antechamber* and the "electronic library" portal

f. *Social Media*

Combination and announcement of articles on social media networks (*Facebook, tweeter, google+, etc.*). Creation of interactions between the web page visitors and CEC through this module.

- The content published on social media will be managed in a centralized way.

5. Functional model

a. Dashboard

- The dashboard will be the first page after the Login in the administration section. It can be customized at the administrator level.
- The dashboard will contain a number of shortcuts to different sections / sub-sections from administration.
- The shortcuts will be defined by the administrator, thus the operations of adding / editing / deleting / arranging them will be fulfilled rapidly and efficiently.

b. General settings

The general setting will allow modifying the settings configured in the platform:

- e-mail server settings (configuration of the e-mail server through which the electronic messages are sent)
- upload limit (maximum allowed size for upload of files, images, etc.)
- upload file format (type of files allowed for upload)
- e-mails of notification administrators (e-mail address to which section notifications are sent)

c. Content management

- Will allow the administrator to set the structure of links in the main menu.
- The structure of the menu will be of a tree-type, hence the main links and the sub-links of the main links will be set.
- The links will be internal and/or external, meaning that the links will be able to direct towards internal/external modules/pages.
- This section will allow also setting the menu from page footer. The setting will be the same as in case of the main menu.
- In the user interface, every page will have the option of share/like/tweet, page printing and sending the link to a friend.
- The site should allow the visitors to subscribe to different information of high interest for them, such as: News and Events / CEC meetings / Press Release / Vacancies / Newsletter etc.
Hence with the help of this section, the administrator will be able to structure any information in a well-defined and very dynamic template.

d. Languages

- This module will allow managing the platform use language. If it will be necessary to add a new language, this operation will be easily carried out in this module through an adding form.
- By adding a new language, the administrators will have automatically the possibility to select the language in which the entry of information is wished.

e. Administrators

- This section will allow configuring the administrator's account and defining the rights for certain modules / actions per module. These rights will be administrated from this section.
- When a new administrator is added, the user name and e-mail address will be filled in, and the access rights of the respective administrator will be selected from list. After saving these data, the new administrator will receive via e-mail a link with confirmation of the configured settings. Accessing the link, he will be obliged to change the password in a password of his own.

6. Security parameters of the CMS:

To protect the solution, as well as to have continuous and efficient functionality, it is important to have an efficient security for the site, using the most recent available methods. Due to the specific nature of the CMS, first of all it needs protection of access to it and of the recently updated version. Thus CMS should have mechanisms for its own authentication, and also activation of filters at the level of the Web server (htaccess etc.).

A criterion for ensuring the information security of the site would be the accessibility for different groups of users, a functionality set by the site administrator:

a. Access to the system

- The access to CMS will be via a Login page with Username and encrypted password, and the system should not allow more than 5 attempts to Log in within an interval of 10 minutes.
- The access of the users' groups responsible for managing the site content should be based on a authentication mechanism based on login/password;
- Possibility of access to the content management system from a list of allowed IP addresses;
- The Login page will be secured according to the security provisions mentioned in this document.

b. Login / Password recovery

The Login page will be the access section to CMS. It will contain a form to be filled in with the e-mail and password of the person who would like to access.

If an administrator or operator will forget the password, he/she will have the possibility to generate a new password sent to his/her e-mail address.

c. Journaling and logging

- The registration in logs of all the actions undertaken by every user of the content management system, as a result of which modifications occur in:
 - site content;

- design elements;
- modification of HTML formatting, name, notification, links with other information elements, template.

7. Architecture, structure and description of the Content Management System (CMS)

Below, there is a description of the structure and architecture of the existing page <http://cec.md>, subject to upgrade, which should not suffer changed from logistical, visual, and architectural points of view.

Bottom Menu

- Home page
- Agenda
- Decisions
- Training Center
 - NEW: will represent a link which will direct the user to the official web page of the Center for Electoral Continuous Training (CECT).
- Information Bureau
 1. NEW: Electronic Library -
will represent a link to the already created portal „Electronic Library”, which has its own design and structure
 2. Newsletter
 3. Information bulletin
 4. Materials of conferences/other events
To exclude, it is transferred to the *Electronic Library*
 5. Elections
 6. Other publications
- Antechamber
- **NEW: On-Line**
This menu will open the page with IFrame directed to the on-line streaming of CEC meetings.

Left Menu

About CEC

- Presentation
 1. Mission
 2. Establishment
 3. Mandate
 4. Brief history
 5. CEC symbols
 6. Rules of Procedure
 7. Declarations

- Composition of the Commission
- CEC Apparatus
 1. Organizational chart
 2. Subdivisions of the Apparatus
- Strategic Plan
- Plans and Reports

Newsreel

- News and Events
- Meetings / Minutes

NEW: In this compartment, in line with every meeting to have the possibility to annex the link to the file with video recording of the meeting, see Fig.1.

 - a. Year 2014
 - b. Year 2013
 - c. Year 2012
 - d. Year 2011
 - e. Year 2009
 - f. Year 2008
 - g. Year 2007
- Public procurements
 1. Tender invitations
 2. Competition results
- Vacancies

Legal Basis

- Legal Basis
 - a. Laws
 - b. Decisions
 - c. Regulations
 - d. Instructions
 - e. Other acts

Elections and Referendums

- Parliamentary elections
- Referendum
- Local elections
- New local elections

The screenshot shows the official website of the Central Electoral Commission of the Republic of Moldova. The header includes the national coat of arms, the commission's name, and a motto in Romanian: "Voința poporului constituie baza puterii de stat. Această voință se exprimă prin alegeri libere, care au loc periodic prin sufragiu universal, egal, direct, secret și liber exprimat. Statul garantează exprimarea voinței libere a cetățenilor prin apărarea principiilor democratice și a normelor dreptului electoral." The navigation bar contains links for "PRIMA PAGINĂ", "ORDINEA DE ZI", "HOTĂRÎRI", "CENTRUL DE INSTRUIRE", "BIROUL DE INFORMARE", and "ANTICAMERA". A search bar is located on the right. The main content area is titled "Ședințe / Procese-verbale" and displays a list of sessions for the year 2014, starting from January 14 and ending on April 15. Each session entry includes the date and a small icon representing the document type (e.g., PDF or video). A sidebar on the left provides quick access to various sections of the website.

Fig.1

Mass-Media

- Press Releases
- Appearances in press
- Photo gallery
- Video gallery
 - **NEW:** In the compartment, the display of the video files (preview) should be in tabular form in "album" style (ex. <http://www.privesc.eu/Arhiva>).

Decision-making Transparency

- Regulations
- Programs / Reports
- Public consultations
 - a. Announcements
 - b. Draft documents
 - c. Other documents

- Results of the development process
 - a. Minutes
 - b. Approved draft decisions
- Other documents

International relations

- Collaboration Agreements
- Trips
- Foreign Assistance Projects
- Useful Links
- Central Electoral Commission
- Central Public Authorities
- International Electoral Authorities
- Electoral Resources

Below, there is the graphical representation of the CMS model.

SITE STRUCTURĂ

The image displays a graphical user interface for editing a website's menu structure. It is organized into three main sections: 'TOP MENU', 'LEFT MENU', and 'Servicii'. Each section contains a list of menu items, each with a title, a subtitle, and a set of control icons (move, lightbulb, edit, delete).

- TOP MENU** (light blue header)
- LEFT MENU** (orange header)
- Marad Moldova** (main menu title with icons)
- Prezentare generală** (Prezentare generală)
- Conducerea** (Conducerea)
- Structura** (Structura)
- Legislație** (Legislație)
- Acte normative interne** (Acte normative interne)
- Legi** (Legi)
- Hotărâri** (Hotărâri)
- Contacte** (Contacte)
- Servicii** (Servicii)
- Servicii de transport** (Servicii de transport)
- Servicii de consultanta** (Servicii de consultanta)
- Actualități** (Actualități)
- Anunțuri** (Anunțuri)

A tooltip is visible over the lightbulb icon of the 'Hotărâri' item, containing the text: "Activează/Dezactivează acest meniu".

Fig.2

- Module – **Simple Page** with content composed of text, tables, images, files, photo gallery attachment, etc.

The following functionalities may be set:

Page print button ,

Increase / Decrease the text,

Show the date of the page last editing,

Buttons for sharing the page on social media pages,

Show the number of views,

Visitors' comments – the way in which the comments will be posted will be discussed subsequently: on social media page or directly on www.cec.md;

- Module – **Entry registration**, is used for news page, registration lists, download of files, photo galleries, and other types of content display.

The following functionalities may be set:

Settings in the registration list

Title of font-size px

Show the text intro

Show the text link "Read more..."

Show the main image

Show the date of publication

Show the data of last editing

Show the number of views

Size of the main image

Number of registrations per page

Settings for registration view

Show the text intro

Show the main image

Show the date of publication

Show the date of last editing

Show the number of views

Print page button

Increase / decrease the text

Buttons for sharing the page on social media sites

Visitors' comments – the same, the way in which the comments will be posted will be discussed subsequently: on the social media page or directly on www.cec.md;

Size of the main image

ANUNȚURI

LISTĂ ADĂUGĂ NOU SETĂRI

Data

18.05.2012 12:18

Înapoi la listă Șterge

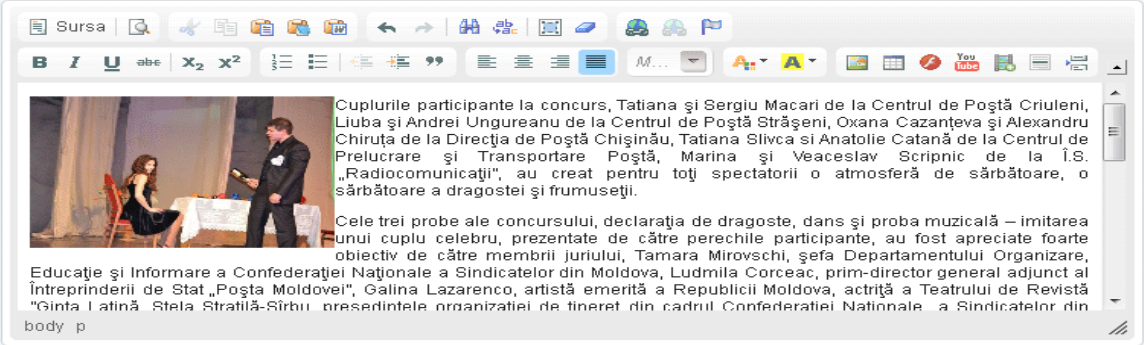
Titlu

Angajații Î.S. „Poșta Moldovei” au participat la Concursul „Jumătatea mea”.

Intro text

Recent, la Teatrul de Revistă „Gînta Latină” s-a desfășurat concursul tinerilor familii ai membrilor de sindicat din ramura comunicației cu genericul „Jumătatea mea”, organizat de către Federația Sindicatelor din Comunicații din Republica Moldova în comun acord cu comitetele sindicale din ramură.

Conținut



Cuplurile participante la concurs, Tatiana și Sergiu Macari de la Centrul de Poștă Criuleni, Liuba și Andrei Ungureanu de la Centrul de Poștă Strășeni, Oxana Cazanteva și Alexandru Chiruța de la Direcția de Poștă Chișinău, Tatiana Silva și Anatolie Catană de la Centrul de Prelucrare și Transportare Poștă, Marina și Veaceslav Scripnic de la Î.S. „Radiocomunicații”, au creat pentru toți spectatorii o atmosferă de sărbătoare, o sărbătoare a dragostei și frumuseții.

Cele trei probe ale concursului, declarația de dragoste, dans și proba muzicală – imitarea unui cuplu celebru, prezentate de către perechile participante, au fost apreciate foarte obiectiv de către membrii juriului, Tamara Mirovski, șefa Departamentului Organizare, Educație și Informare a Confederației Naționale a Sindicatelor din Moldova, Ludmila Corceac, prim-direc tor general adjunct al Întreprinderii de Stat „Poșta Moldovei”, Galina Lazarenco, artistă emerită a Republicii Moldova, actriță a Teatrului de Revistă “Gînta Latină” Stela Stratilă-Sîrbu, președintele organizației de tineret din cadrul Confederației Naționale a Sindicatelor din body p

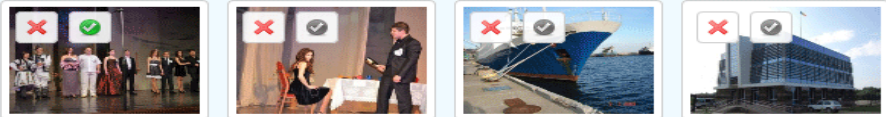
Descriere succintă a paginii (Meta Description)

Recent, la Teatrul de Revistă Gînta Latină s-a desfășurat concursul tinerilor familii ai membrilor de sindicat din ramura comunicației cu genericul Jumătatea mea

Cuvinte cheie (Meta Keywords)

teatru, concurs, jumătatea mea, moldova

Imagini atașate



Atașează imagine

Fișiere atașate

Lista participantilor la concurs (48KB) Șterge

Lista cistigatorilor (3.4MB) Șterge

Atașează fișier

Salvează Înapoi

Fig.4

- Possibility to set the site in **technical break** to make some more complex changes on the site. The content of the site may be viewed only by the site administrator.

8. Implementation stages

The development, fulfilment, testing, and implementation activities should be carried out by specialized companies and institutions with experience in the area and with necessary licenses to fulfill the works and should cover the following stages:

1. *The stage for developing the CMS system:*
 - a. The developer develops the CMS system and integrates the existing modules of the web page cec.md into a prototype version of the information system.
 - b. The developer will make the first presentation of the parts, proving the existence of all the functionalities requested in this technical specification;
 - c. The developer tests the CMS system in lab regime (internal testing) demonstrating the functionalities in the testing regime;
 - d. The developer prepares the minutes for accepting the submitted version so as to be signed by both parties;
2. *The stage of implementing the CMS system* will start when the acceptance minutes for the CMS system and its modules in the presented version is signed by CEC and when the act of reception for testing operation is signed. This stage will include the migration of the present site www.cec.md to the new accepted CMS system and developed modules.
3. *The training stage* will start with the implementation of the informational solution and will cover the training of 2 users from the IT subdivision of the *Central Electoral Commission* for the role of *Administrator* and 3 users from the relevant subdivisions of *CEC* for the role of *Operator*.
4. *The stage for launching into operation*, will start when the act for launching the system into operation is signed and the use of the system starts.
5. *The stage for maintaining the system*, is the period when the developer of the system assumes itself the obligation to assist the owner with maintaining or modifying the software product, preserving its integrity – 12 months.