

eSession – WHITEPAPER

More than video meetings



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► Business case

The business leaders in the modern world need to have documents available outside their work environment: in their cars, planes, while they are away on business, during meetings outside the company's premises or after working hours.

For business decision-makers, materials from the sessions of corporate and administrative decision-making bodies must be available at all times. On the other hand, access to items, materials and sessions must be safe and controlled.

The materials must be structured and grouped in a single location. Access to sessions must be enabled at all times. The management has a real need to vote on the items on the agenda from the opening until the closing of the session.

Monitoring the realization of conclusions from the session represents an important function that needs to be provided as an added value of the solution.



► How do we satisfy this business need?

By implementing an eSession solution, we help organizations increase their productivity, adopt better decisions and reduce expenses. eSession, as a modern solution, allows the preparation and holding of electronic sessions in a wide range of companies, including corporations, telecommunication companies, banks, insurance companies, public sector, local self-government.

Through a defined and automated process of the delivery and approval of items and materials, we are standardizing the process of preparation of the item for the session. The documents are located in a single, central location, which allows efficient access and search.

A session of a Session board is prepared, scheduled and held via an eSession solution. The solution covers the entire course of session preparation, scheduling, holding and execution monitoring.

The session participants may review the items and materials immediately after the scheduling of the session and may cast their votes immediately. Bearing in mind that the eSession solution can be accessed via mobile and tablet devices, the votes can be cast from any location.

Having in mind integration possibility with Microsoft Office 365, Teams, Exchange, Document management solutions, the electronic clerk's office and other business applications, the eSession solution is networked into the application infrastructure of the company.

The advantages of solution implementation are the following:

- Increasing session productivity and efficiency
- The easy availability and efficient exchange of materials
- Reduction of material printing and distribution costs
- Material preparation process management
- Session preparation process management
- Access to the system from laptops or mobile devices
- The ability to vote from any place, at any time
- Possible integration with Microsoft Office 365, Teams, Document management systems, Exchange, the clerk's office and the like

► Function description

The main functions of the solution relate to the process of session holding, from the preparation and verification of proposals, creating a session and adding proposals to the session's item or subitem, scheduling a session and sending invitations to the participants, accessing the materials and voting on items/subitems, and reviewing the results of voting, to the distribution of materials to the end-users - the members of the working body, employees and other parties to whom the materials need to be distributed.

According to their role, the users of the application can be divided into the following roles:

- Proposer - the user who creates a proposal, representing an agenda item
- Session administrator - the user who amends and verifies the proposal, prepares and schedules the session, defines the agenda, distributes the materials from the session, monitors the execution of the conclusions from the session
- Session participant - the user who attends the session with corresponding rights granted to him/her by the Session administrator: Review right, voting right, reporter
- Solution administrator - the user who administrates the solution: the administration of users, assigning of roles, administrating the codebook and the like.

The eSession solution consists of the following modules:

- Proposal preparation
- Session administration
- Holding of the session
- Reporting
- System administration (codebook, working bodies, permanent members, application user and role administration)

► Proposal preparation

The proposal preparation module is a first segment that starts the course of the electronic session. The users that have been assigned the role “Proposer”, i.e. the “Session administrator”, have the option of reviewing the created proposals intended for and representing the subject of the decision-making process at the session in question, as well as the option of creating new proposals. The home screen shows a list of all the proposals according to their status.

Illustration 1 | Proposal review and search

The screenshot displays the 'Proposals' management interface within the COMTRADE SYSTEMS INTEGRATION application. The interface includes a sidebar for navigation and a main content area for proposal review and search.

Sidebar (Left):

- My proposals (dropdown)
- All (15)
- In preparation (5)
- Returned to refinement (0)
- On verification (0)
- Verified (0)
- Included in agenda (11)
- Forms of the proposal

Main Content Area (Proposals):

Search filters: Name of the proposal, Board name, Status of the proposal (In Preparation), Creation date from, Creation date to.

Name of the proposal	Session board	Status of the proposal	Date creation
Plan definition for 2021	Надзорни одбор	In Preparation	18.04.2020 10:43
Meeting minutes approval	Надзорни одбор	In Preparation	06.05.2020 08:58
Plan definition for 2021	Надзорни одбор	In Preparation	06.05.2020 09:06
Meeting minutes approval	Надзорни одбор	In Preparation	06.05.2020 09:08
Training preparation	Надзорни одбор	In Preparation	06.05.2020 09:38

5 Total

For each of the created proposals, it is possible to review the details, in particular: the basic information about the proposal, the materials for the proposal, review of proposal change history. Depending on the status of the proposal, as well as the role of the users, certain actions are also available (proposal change, proposal verification, returning of the proposal for rework).

Illustration 2 | Proposal details

Proposal data

Attachments1

Movement

Session board

Надзорни одбор

Status

IncludedInAgenda

Date of proposal

03.04.2020

Organizational unit

Delivery

Confidentiality level

Interno

Subject

Promotions

Number of initiation

Initiator

Manager

Director permission

Yes

No

Note

session

The proposal preparation process implies the process of the creation and verification of the proposal that would be discussed and decided upon at the session.

The process of the preparation and verification of the proposal for the item on the agenda is divided into several steps.

The process is initiated by the Proposer by selecting the Session board and by entering the proposal title and other metadata describing the proposal. The proposal attribute set can be configured and is defined during the solution configuring phase, and thus does not require additional development.

Illustration 3 | Proposal preparation

My proposals

All16

In preparation5

Returned to refinement0

On verification0

Verified0

Included in agenda11

Forms of the proposal

Session board

Надзорни одбор

Status

InPreparation

Date of proposal

04.05.2020

Organizational unit

PMO

Confidentiality level

Interno

Attachments0

Subject

Training preparation

Number of Initiation

Initiator

Director permission

☐ Yes☒ No

Note

Movement

✓

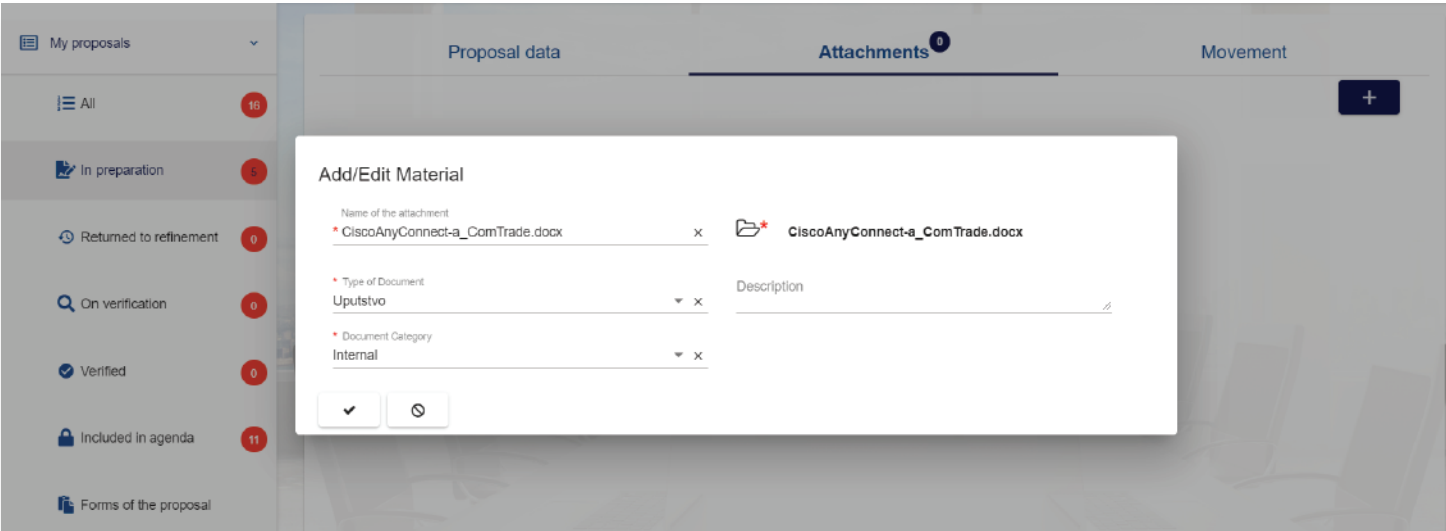
⊙

←

✉

After entering the basic data, it is possible to attach materials, i.e. documents, for each proposal and to define the data describing the document itself.

Illustration 4 | Attaching of materials



By default, the document is imported from the user’s file system, but the system also supports the option of selecting the data from the Document management system that supports the work of the clerk’s office, ERP and the like.


The application records the history of all the added documents, with a note on which version is currently active. While importing the documents in Word, Excel, PowerPoint, JPEG, PNG and TIFF format, such documents are automatically converted into PDF format.

If they want to, the users can review the original document in the form in which it was imported.

All the documents are kept in a shared document repository.

The solution keeps records of all significant events concerning the objects in the system. This allows the user to review the course of proposal processing at any time.

Illustration 5 | Proposal history summary

COMTRADE
SYSTEM INTEGRATION

My proposals

All16

In preparation5

Returned to refinement0

On verification0

Verified0

Included in agenda11

Forms of the proposal

Proposal data

Attachments1

Movement

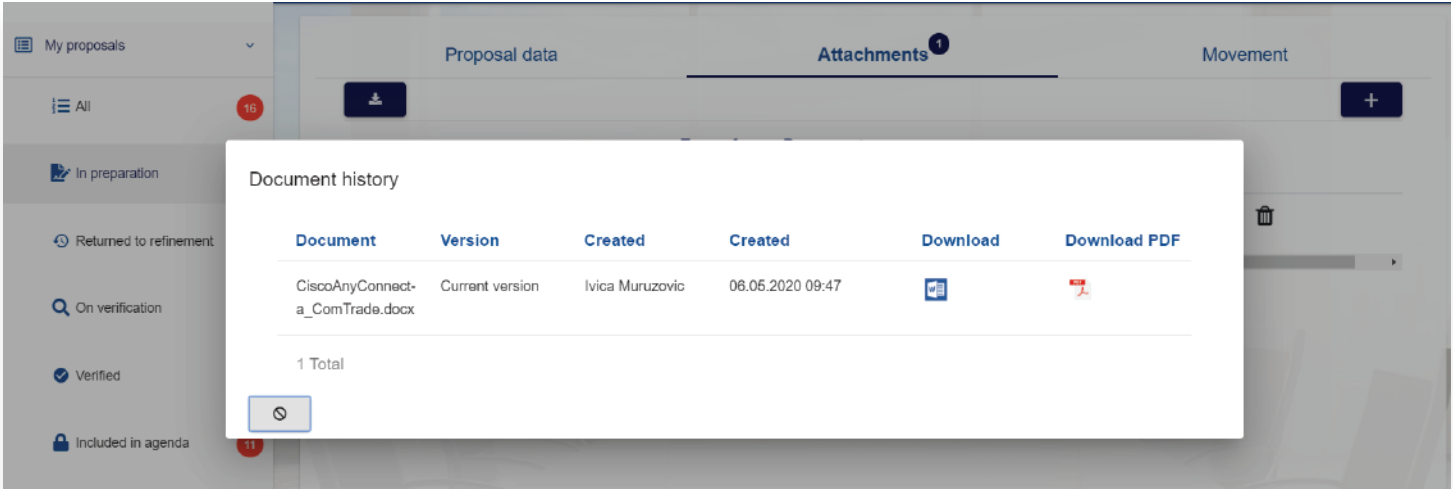
Date	Action	User	Comment
06.05.2020 09:39	Created	Ivica Muruzovic	
06.05.2020 09:47	Added new material	Ivica Muruzovic	CiscoAnyConnect-a_ComTrade.docx
06.05.2020 09:47	Updated	Ivica Muruzovic	
06.05.2020 09:48	Updated	Ivica Muruzovic	
4 Total			

✓

←

The user also has access to the document processing workflow.

Illustration 6 | Document history summary



After the successful creation of the proposal, it is possible to send the proposal for verification, change the data before sending or withdraw the proposal, i.e. delete it.

The proposal verification process differs depending on whether the proposer is also the session administrator for the working body, in which case the status of the proposal automatically changes to “Verified” and can be added to the session.

Otherwise, the proposal's status changes to “Under verification” and the harmonization process begins. When the proposal has this status, the Proposer can only review the proposal, without the possibility of making any changes. The session administrator has the following options:

- ▶ to change the data about the proposal, i.e. to make adequate corrections and to verify such a changed proposal
- ▶ to return the proposal to the Proposer for rework if changes need to be made by the Proposer, in which case the same proposal approval (verification) process is carried out (repeated)
- ▶ to verify the proposal if the proposal is ready to be added to the session



► Session administration

The session administration module is a segment of the eSession solution in which the creation and scheduling of the session is carried out.

Similar to the previous module for session preparation, as its initial segment, this module is also followed by the search and review of the existing sessions according to the predefined criteria.

Illustration 7 | Session search and review

COMTRADE
SYSTEM INTEGRATION

English Ivica Muruzovic

Managing sessions

Name of the session Board name Status Creation date from Creation date to

+ 🔍

Name of the session	Board name	Status	Date and time	Session location	Date added
130. Redovna	Надзорни одбор	In Preparation	23.04.2020 17:40	Beograd	27.04.2020 16:26
129. Redovna	Надзорни одбор	Completed	22.04.2020 10:00	Beograd	18.04.2020 13:00
Sednica 05.04	Надзорни одбор	In Preparation	05.04.2020 22:00	Beograd	05.04.2020 21:51
Session for demonstration	Надзорни одбор	Scheduled	17.04.2020 11:45	Belgrade	03.04.2020 14:12

It is possible to review the details of the existing sessions, in particular the following: the basic information about the session, session item/subitem details, session participants and documents relevant for the session.

Depending on the status of the session, certain actions are available (changing, scheduling and cancelling the session).

Illustration 8 | Session details

Session data	Items/Subtems	Participants	Session documents
Name of the session Session for demonstration		Session location * Belgrade	
* Status In Preparation		Date * 17.04.2020 11:45	
* Session board Надзорни одбор		* Session type Regular	
<div>✓</div> <div>⌕</div>			

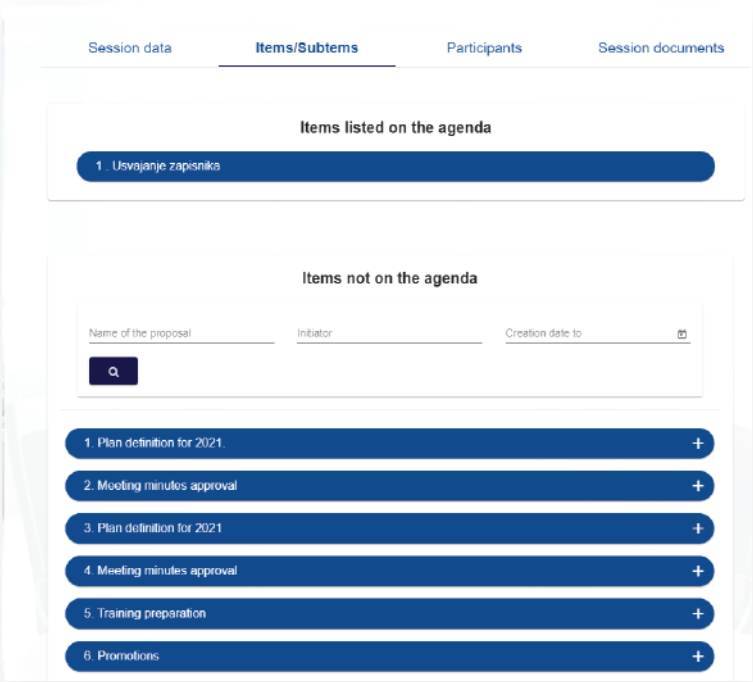
The session creation process starts with the entry of the basic set of attributes relevant for the session itself. The session attribute set can be configured and is defined during the solution configuring phase, and thus does not require additional development.

After the entry of all the session data, the status of the session changes to “Under preparation”. In this status, it is possible to change all the data about the session.

When this status is active, none of the participants have access to the session.

The session administrator prepares an agenda by adding proposals that were previously verified as items/subitems of the agenda. There is an option of defining default items that would be automatically added to the agenda, such as “Adoption of agenda”, “Meeting minutes approval” and the like. Each item or subitem added to the agenda can be removed from the agenda. If changes need to be made to the proposal, certain changes can be made and the proposal can be added to the agenda once again. The session administrator sees the proposals that are ready for adding to the session and has the option of searching the proposals.

Illustration 9 | Adding proposals to the session



While adding the proposals to the session, it is possible to define whether the proposal is being added as an item or as a subitem.

Illustration 10 | Adding proposals as session items

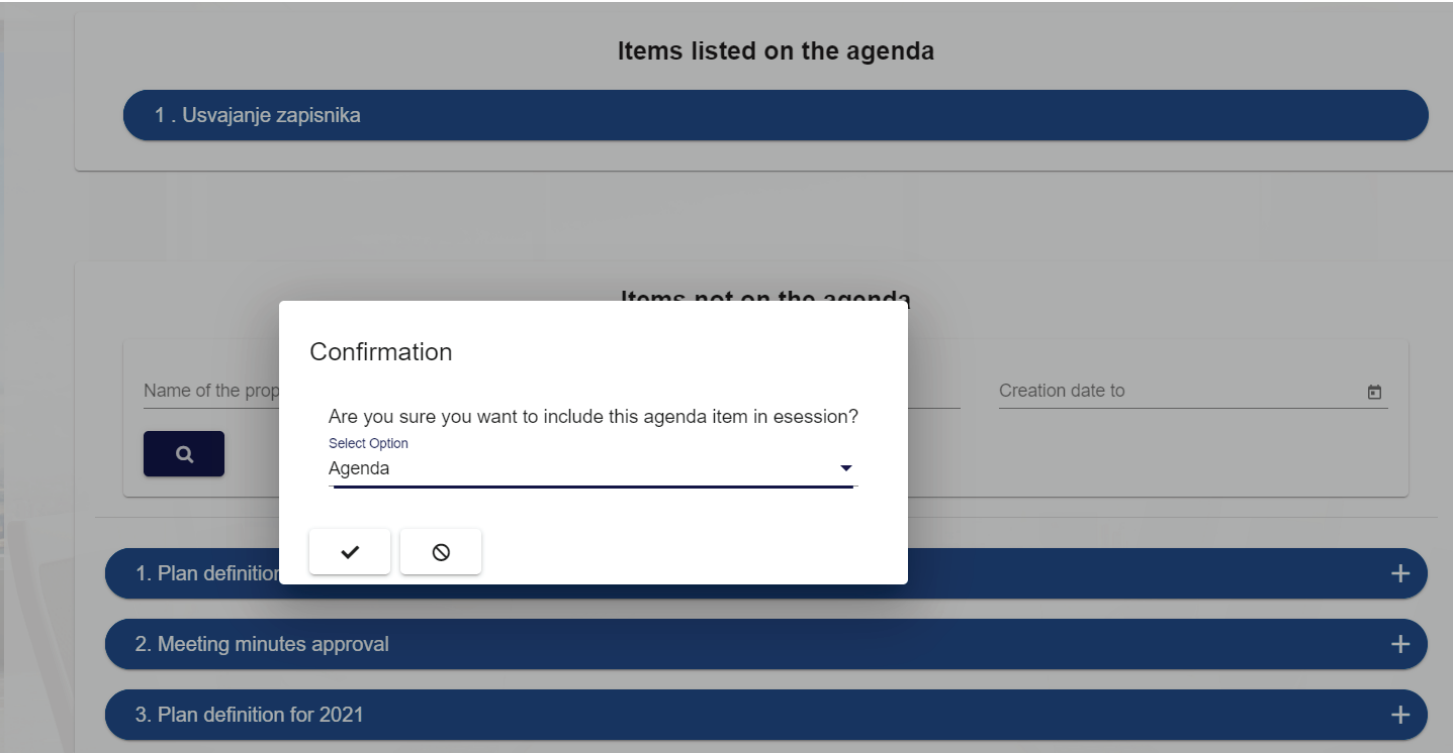
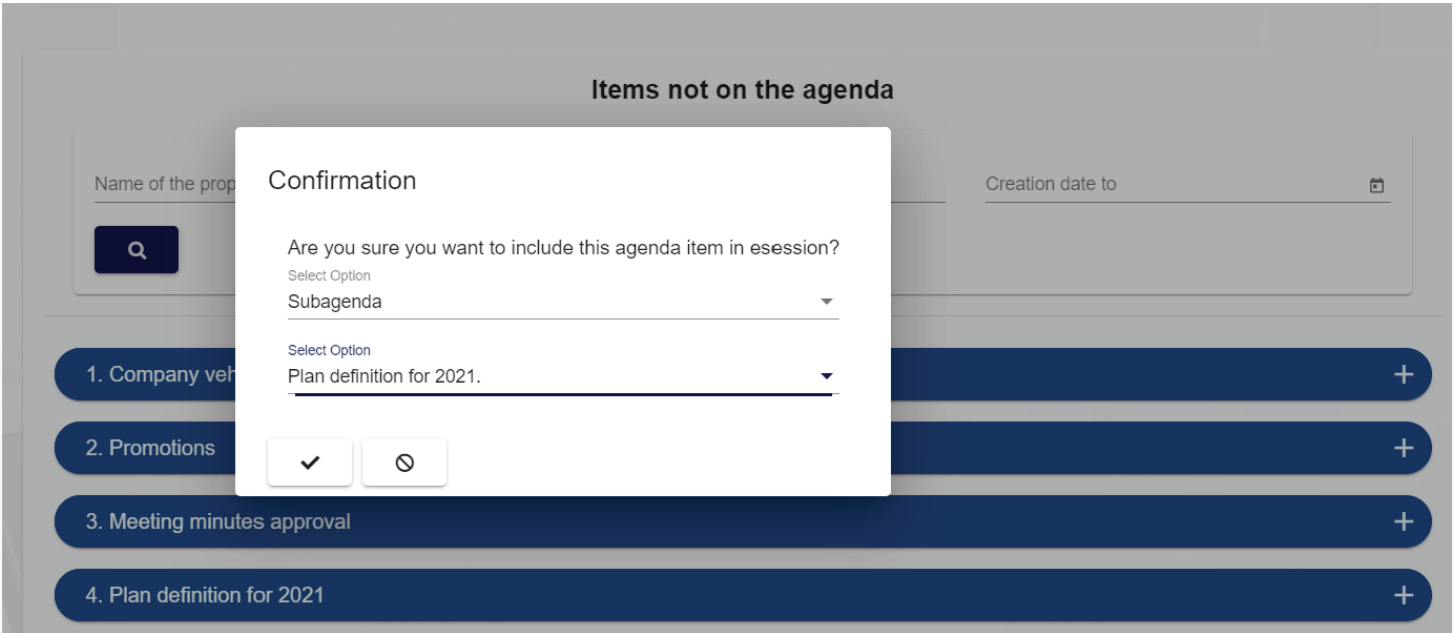


Illustration 11 | Adding proposals as session subitems



Each item added to the agenda is assigned a sequence number. All subitems within an item are assigned their sequence numbers based on the sequence number of the item in the agenda. For example: if the sequence number of the item is 2, all subitems assigned within this item are assigned their sequence numbers in chronological order 2.1, 2.2, 2.3, etc.

Illustration 12 | Numbering of items in a session

Session data	Items/Subtems	Participants	Session documents
Items listed on the agenda			
1 . Usvajanje zapisnika			
2 . Plan definition for 2021. ×			
2.1 Training preparation ×			
3 . Promotions ×			

All items added to the agenda can be sorted, i.e. their sequence can be changed, which results in the change of their sequence numbers. If an item contains subitems, the change of the sequence number of the item results in the change of the sequence number of the subitems. Furthermore, it is possible to change the sequence of subitems within an item. A subitem may change item, i.e. can be relocated to belong to some other item.

For each item added to the agenda, the Session administrator may review item’s details, documents and processing history.

Illustration 13 | Session item summary

Session data

Items/Subtems

Participants

Session documents

Items listed on the agenda

1 . Usvajanje zapisnika

2 . Plan definition for 2021.

3 . Promotions

Details of the proposal

Materials²

Session board

Надзорни одбор

Status

IncludedInAgenda

Date of proposal

18.04.2020

Organizational unit

PMO

Confidentiality level

Javno

Subject

Plan definition for 2021.

Number of initiation

Initiator

Ana Mandarić

Director permission

☒ Yes ☐ No

Note

2.1 Training preparation

After defining the agenda, the participants in the session need to be defined. The permanent members of the Session board, that were previously defined in the permanent member administration, are initially shown in the list of session participants.

The list can be changed by adding new participants or by deleting existing ones. For each participant, it is possible to define the items/subitems of the agenda that can be reviewed, the voting rights and whether he/she is the reporter.

After administrating the session participants, it is possible to define which of the participants would chair the session (manage the course of the session, close the session).

Illustration 14 | Session participants

Session data

Items/Subterms

Participants

Session documents

Q Choose a user

Session operator

Ivica Muruzovic

1. Mara Mladenovic

X

Functional group

President

Item name

☒

Items in which the user has insight

☒

The user has the right to vote

Rapporteur

1. Usvajanje zapisnika

☒

☒

☐

2. Plan definition for 2021.

☒

☒

☐

2.1. Training preparation

☒

☒

☐

3. Promotions

☒

☒

☐

2. Luka Pantelic

X

3. Vladimir Varagic

X

4. Ana Mandaric

X

e session

For each session, it is possible to automatically generate documents, for example: agenda, delivery note, etc. These documents can be generated based on the document template added to the solution in the configuration.

Illustration 15 | Automatically generated documents for the session

Session data		Items/Subtems		Participants		Session documents				
<div><div></div><div></div></div>						<div></div>				
Document name	Document type	Creation User	Creation Date	Modification User	Modification Date	Actions				
Agenda	Agenda	Ivica Muruzovic	06.05.2020 10:19			<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Front page	Front page	Ivica Muruzovic	06.05.2020 10:19			<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Delivery note	Delivery note	Ivica Muruzovic	06.05.2020 10:20			<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
<div><div></div><div></div></div>										

Illustration 16 | Example of an automatically generated document

**SUPERVISORY BOARD
PUBLIC ENTERPRISE „***“**

Pursuant to Article 5 of the Rules of Procedure of the Supervisory Board of the Public Company "****", a Meeting for a demonstration of the Supervisory Board of the Public Company "****" is convened for April 22, 2020..

The session will be held in the premises of the Public Company "****" in Belgrade, the hall on the VIII floor will start at 10:00.

After the Session for the demonstration of the Supervisory Board of the Public Company "****", _____ will be held. _____ meeting of the Supervisory Board in function ***, d.o.o. Belgrade starting in _____. _____ hours.

We suggest the following for the session

AGENDA

Proposed agenda items - Session for demonstration of the Supervisory Board meeting:

Agenda item / sub-item
1 .Agenda
2 .Plan definition for 2021.
2.1 Training preparation
3.Promotions

In addition to the automatic generation of documents, it is possible to add additional documents while creating the session.

Illustration 17 | Additional documents for the session

Session data		Items/Subtems		Participants		Session documents	
<div><div></div><div></div></div>						<div><div></div></div>	
Document name	Document type	Creation User	Creation Date	Modification User	Modification Date	Actions	
Agenda	Agenda	Ivica Muruzovic	06.05.2020 10:19			<div><div></div><div></div><div></div><div></div><div></div></div>	
Front page	Front page	Ivica Muruzovic	06.05.2020 10:19			<div><div></div><div></div><div></div><div></div><div></div></div>	
Delivery note	Delivery note	Ivica Muruzovic	06.05.2020 10:20			<div><div></div><div></div><div></div><div></div><div></div></div>	
		<div><div></div><div></div></div>					

When the session is finally created - ready, it can be scheduled. The session administrator changes the status to “Scheduled”. An e-mail invitation to participate in the session can be sent to the session participants. While sending the e-mail, it is possible to define a set of documents that would be forwarded to the participants in the e-mail, together with the text of the e-mail.

Illustration 18 | Invitation to session participants

Send participant invites

Participants

x Mara Mladenovic

x Luka Pantelic

x Vladimir Varagic

x Ana Mandaric

x Ivica Muruzovic

Session documents

Add attachments

Delivery note x

Agenda x

Front page x

B I U S ” ‹ › H₁ H₂ ☰ ☷ x₂ x² ☰ ☷ ¶ Normal ⌵ Normal ⌵ A A Sans Serif ⌵ ☰

Dear Sir/Madam,

invitation documentation is in attachment...|

From the scheduling of the session, all the session participants can access the session. Depending on the previously assigned rights, the participants can review the items, materials and vote on items on the agenda.

► Holding the session

When accessing the scheduled session, the session participant can review the basic session data, items/subitems on the agenda and the documents (materials) that are relevant for the items, as well as the currently present session participants (visually prominent participants).

Illustration 19 | Holding the session

The screenshot displays the COMTRADE SYSTEMS INTEGRATION interface. The left sidebar contains a menu with the following items: My proposals, Proposals Administration, Session Administration, Electronic sessions, Session for demonstration, 121. Redovna, Naziv 102, Kreirao sam je kao zakazanu, and Test sednica 2012. The main content area is titled 'Session for demonstration' and shows a list of agenda items with their respective voting status and counts:

Item	In favour	Restrained	Against	Comments
1. Usvajanje zapisnika	2	1	2	0
2. Plan definition for 2021.	0	1	0	0
2.1. Training preparation	0	1	0	0
3. Promotions	0	0	1	0

On the right side, the 'Meeting participants' section lists the Chairman, Mara Mladenovic, and the Members, Luka Pantelic, Vladimir Varagic, Ana Mandaric, and Ivica Muruzovic.

The session participant can review the item details and thus familiarize himself/herself with the item and decide on casting the vote.

Illustration 20 | Review of item details

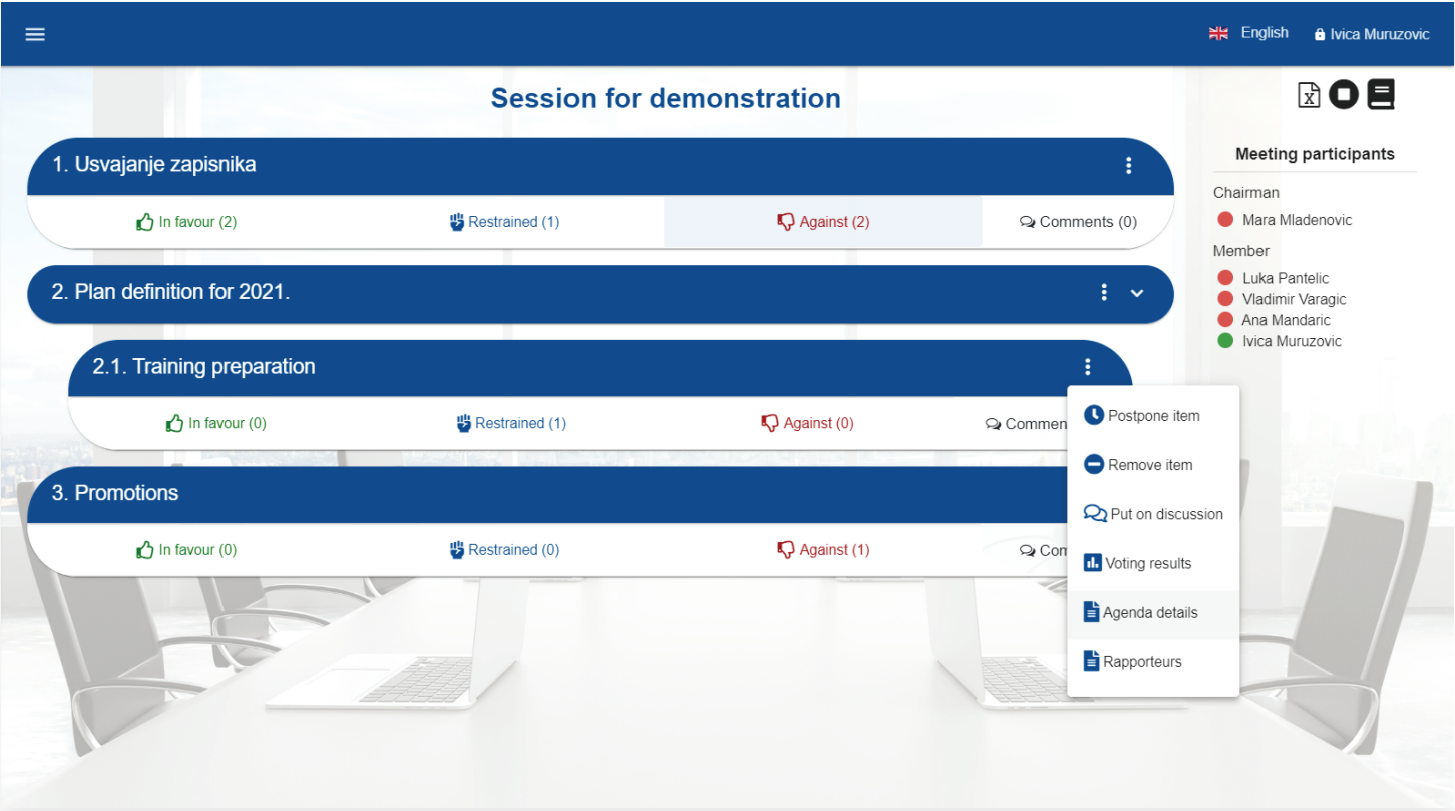


Illustration 21 | Item details

1. Usvajanje zapisnika

2. Plan de

2.1. T

3. Promot

Details of the proposal

Materials¹

Session board

Надзорни одбор

Status

IncludedInAgenda

Date of proposal

04.05.2020

Organizational unit

PMO

Confidentiality level

Interno

Subject

Training preparation

Number of initiation

251

Initiator

Director permission

☒ Yes ☐ No

Note

Comments (0)

Comments (0)

Comments (0)

Comments (0)

Illustration 22 | Attachment / materials for the item

1. Usvajanje zapisnika

2. Plan de

2.1. T

3. Promot

In favour (2)

Restrained (1)

Against (2)

Comments (0)

Details of the proposal

Materials¹

Num

Name of the attachment

Type of Document

Document Category

Description

Actions

1

CiscoAnyConnect-a_ComTrade.docx

Uputstvo

Interni

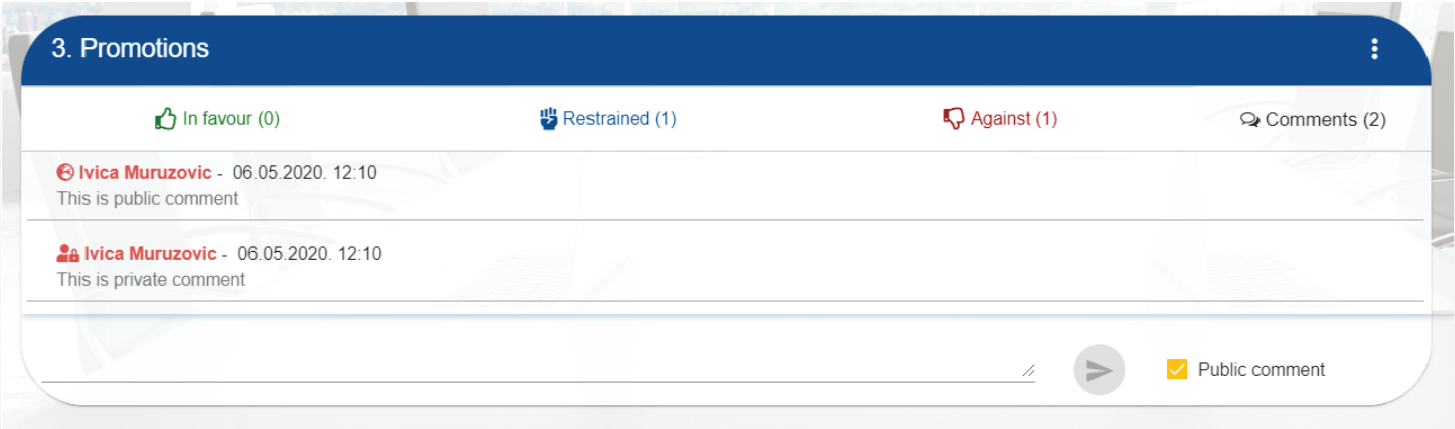
Comments (0)

Comments (0)

Comments (0)

The session participants can also make comments on each item/subitem. While making comments, the participant defines whether the comment is public or private. A public comment is visible to all the session participants, while the private comment is visible only to the participant who made the comment.

Illustration 23 | Item comments

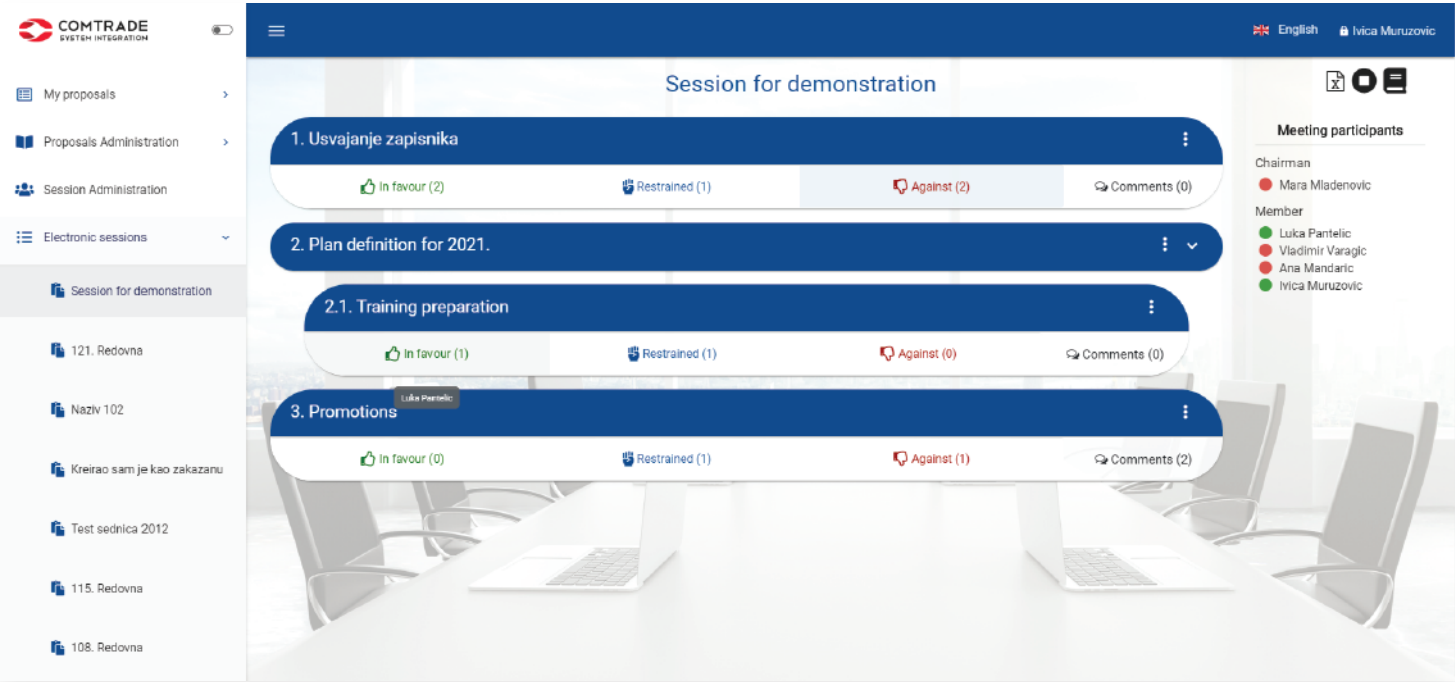


The session participants with voting rights have voting options at their disposal. If the session participant does not have a voting right for any of the items/subitems, such a participant will not have voting options available.

For the item(s)/subitem(s) on the agenda for which the participant has the voting right, the session participant can cast his/her vote by selecting “In favour”, “Abstention” or “Against”.

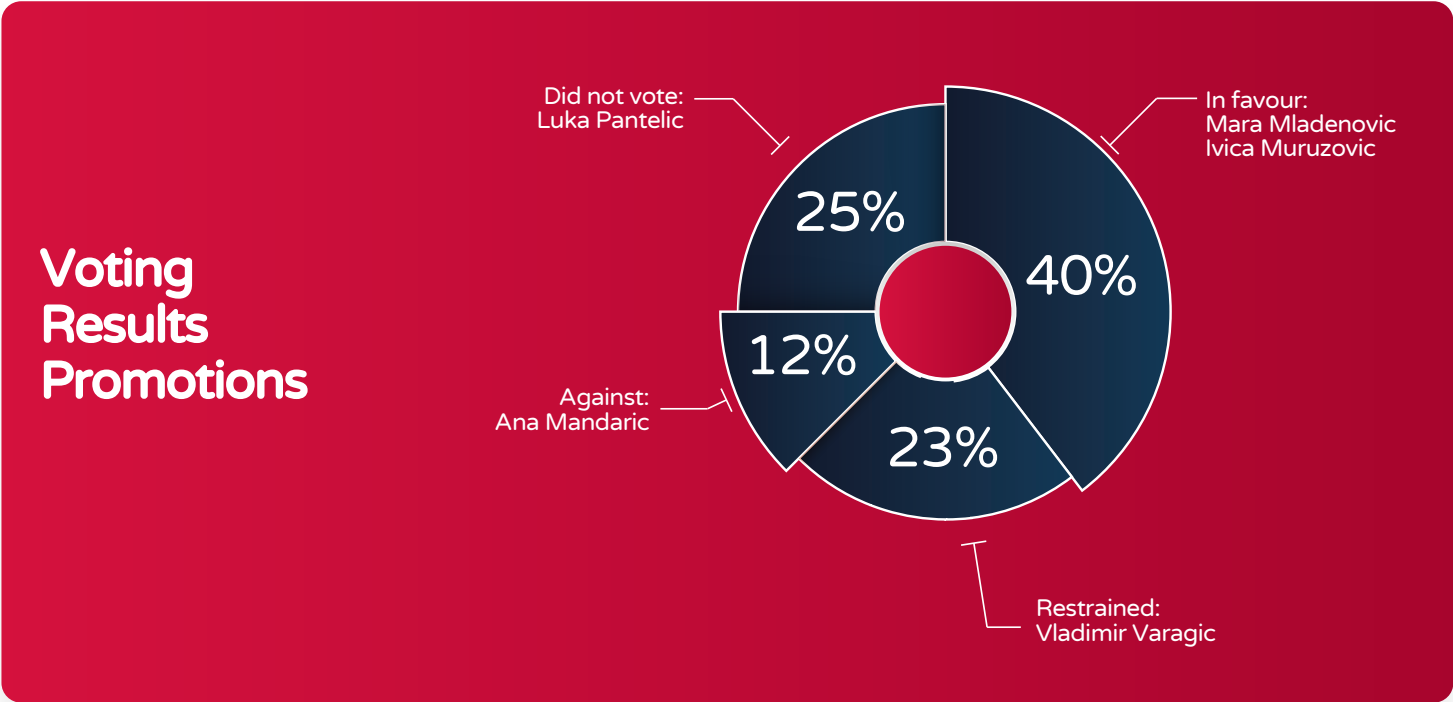
The casted vote is automatically visible to all other participants if they have been previously assigned the right to review. Once a vote is cast, the session participant can change such a vote until the Chairman closes the session, i.e. until the end of the session.

Illustration 24 | Voting on items



At any given moment, the session participants have the option of reviewing the voting status, which shows whether the participant has voted “In favour”, “Against”, “Abstention” or “Not voted”.

Illustration 25 | Review of voting results



At the level of the Session board, it is possible to define the default algorithm used to determine the voting results of the item. It is possible to define that the item is deemed adopted if one third, two thirds, etc. of the participants vote for the item. All the items within the Session board have such a result determination mechanism by default.

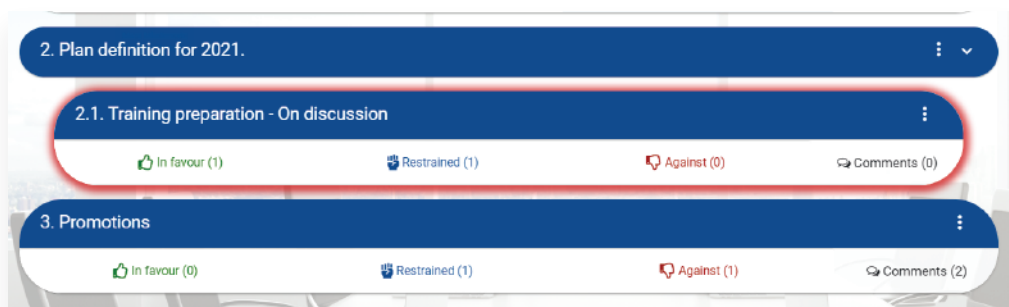
It is possible to adjust the solution so that an algorithm used to determine the voting results can be defined at the level of each item/subitem.

Furthermore, it is possible to define that the voting for the subitems is carried out at the item level. In this case, the vote for an item is automatically transferred to all the subitems. In this scenario, it is possible for the participant to change the vote on individual subitems.

The additional functions that can be set at the solution level are as follows:

- ▶ Adoption of the agenda - it is possible to set the solution to require the adoption of the agenda before allowing voting on the items. The session administrator declares that the agenda has been adopted
- ▶ Putting items to the discussion - the function that allows putting items to the discussion. The session Chairman or Session administrator may declare that the item is open for discussion. The item open for discussion is visually visible to all the participants in the session

Illustration 26 | Item open for discussion

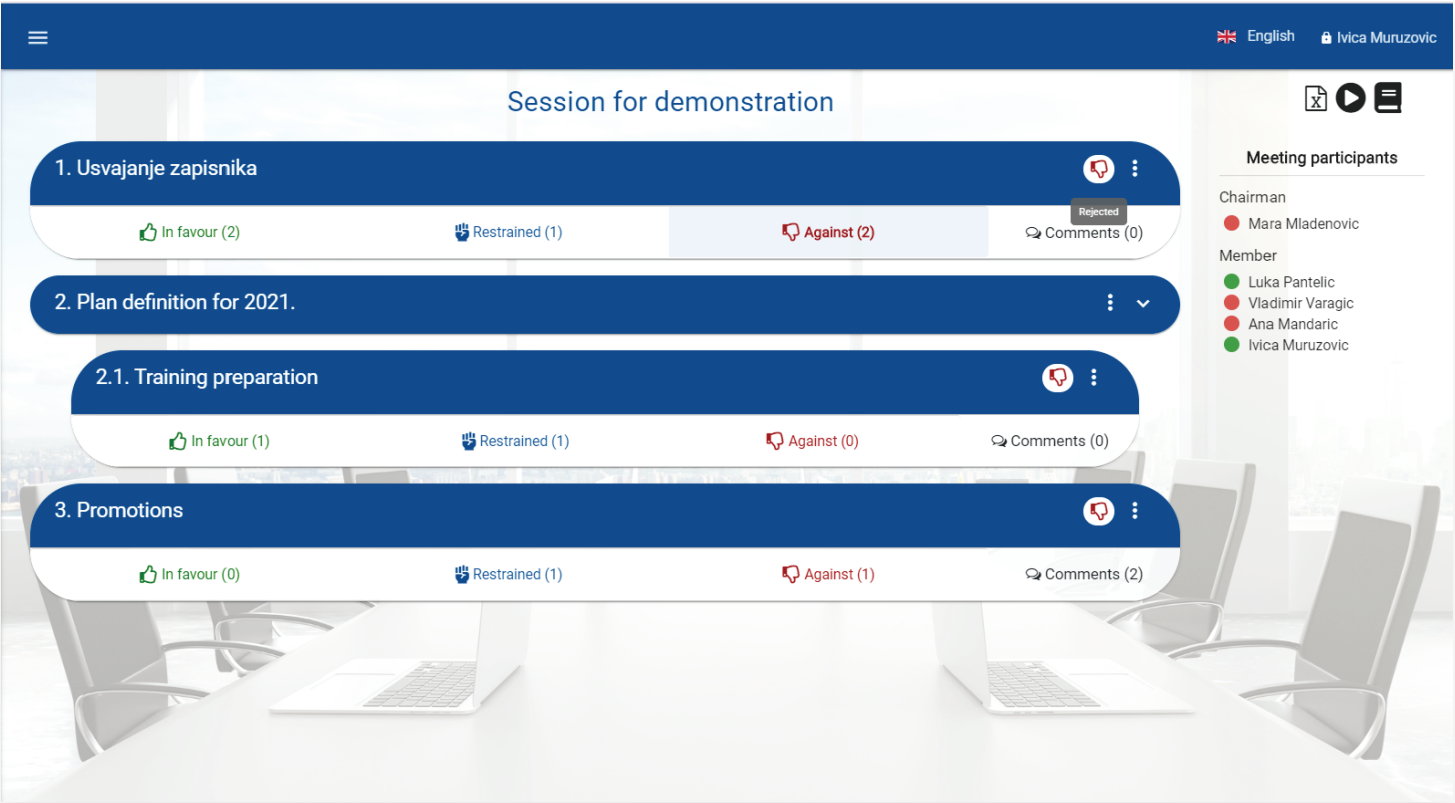


- ▶ Postpone the item - the Chairman may postpone one or more items/subitems for another session. This changes the status of the item/subitem to “Postponed”. All the votes cast until that moment are deleted and no voting is permitted for such item/subitem. The postponed item can be added to another session
- ▶ Session cancellation - a session that was scheduled and was not held may be cancelled by changing the session status to “Cancelled”, after which the participants receive an e-mail informing them that the session has been cancelled. It is possible to change all the data, to define a new date and time of the session and to reschedule the session
- ▶ Postpone the session - If it is necessary to postpone the session for some other day, the Session administrator may change the session status to “Postponed”. The voting results for all the items voted on until that moment are saved. The Session administrator may reschedule the session and define the time and place of the new session

By closing the session, the Session administrator or Chairman marks the end of the session, whereby the status of the session is changed to “Closed” and it is no longer possible to vote or change the voting results.

All the votes received until that moment are taken under consideration and the results of the session are calculated per items. As previously noted, the voting results depend on the algorithm defined at the item level. This algorithm determines whether the item has been Approved or Denied.

Illustration 27 | Review of voting results



All the participants can see the voting results per items or subitems.

▶ Reporting

Distribution of documents from the session

For each item/subitem, the Session administrator may enclose a set of documents representing the “Result of the session”. This set of documents may include, for example, the Decision, Instruction and Conclusion.

After the status of the session has been changed to “Closed”, the Session administrator may distribute the documents which represents the session result.

The Session administrator marks the documents he/she wants to send, enters the e-mail addresses of the recipients and the body text of the e-mail. By confirming the sending, the material is sent to the e-mail addresses of the recipients. The session administrator may distribute the documents to various recipients several times.

Illustration 28 | Distribution of documents from the session

2. Plan definition for 2021.

1. Plan decision for 2021. ☒

2.1 Training preparation

3. Promotions

Create list of users for material distribution:

Choose a user

Q Mara Mladenović

x Ana Mandaric x Mara Mladenovic

Message

B I U H1 H2 x₂ x² Normal Normal Sans Serif

Please find Plan decision for 2021. In attachment..|

The document sending trace is available in the session review, where one can see which materials have been sent to which e-mail addresses and when.

► Monitoring the execution of session conclusions

The Session administrator chooses the documents to be sent to the persons in charge of execution for the items/subitems the execution of which he/she wants to monitor.

The following is defined during sending: the documents to be sent as an attachment with the message, the message text, date of sending - initially set to the current date, the execution deadline - the date by which the execution is required, the execution status - automatically set to the value “Sent for execution”, the persons in charge of execution - e-mail addresses of the persons in charge of execution, the sector to which the person in charge of execution belongs, a note.

Illustration 29 | Entry of data for execution monitoring

Document realization tracking

Realization data

Executors

Documents

Add attachments

Work plan 3

Connection manual 3

Plan decision for 2021. 3

Message

B

I

U

H1

H2

x₂

x²

Normal

Normal

Sans Serif

Please follow these conclusions

Date sent *

06.05.2020

* Deadline realization *

* Realization Status

Send To Realization

Note

Illustration 30 | Entry of persons in charge of execution

Document realization tracking

Realization data

Executors

Documents

Full name

Email

Sector

Actions

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EA

It is possible to send the item/subitem for execution monitoring multiple times, with the option of defining a various set of documents and persons in charge of execution. Each transmission is treated as a separate package which is then monitored through the system.

The session administrator changes the execution status.

If the execution has not been achieved by the defined deadline, the system sends a mail notification to the Session administrator. The Session administrator has the option of defining a new deadline for the execution. The session administrator has the option of generating reports on monitoring the session conclusion execution over a specified time period.

The report is given in the form of an Excel file with all the necessary information and visual indications showing the execution status of the item.

Illustration 31 | Execution monitoring report

Document realization tracking for period 27.05.2019. - 31.05.2019.								
Session - item/subitem	Documents	Due date	Executors	Sectors	Status	Delivery date	Realization date	Remark
Session for demonstration - 2. Plan definition for 2021.	Work plan Connection manual Plan decision for 2021.	27.05.2019.	Ana Petrović Ana Mandarić Ana Jovanović	Energy department HR department Legal Department	Sent to realization			Remark 1
Session for demonstration - 2.1 Training preparation	CiscoAnyConnect...	28.05.2019.	Mara Petrović Mara Mladenović	Education department Tourist department	Accepted	27.05.2019.		Remark 2
Session for demonstration - 3. Promotions	Promotions	31.05.2019.	Ivica Muruzović	Energy department	Realizovana	27.05.2019.	30.05.2019.	Remark 3

► System administration

The system administration is performed by the user that has the role “Solution administrator”.

The solution administrator may administer the following:

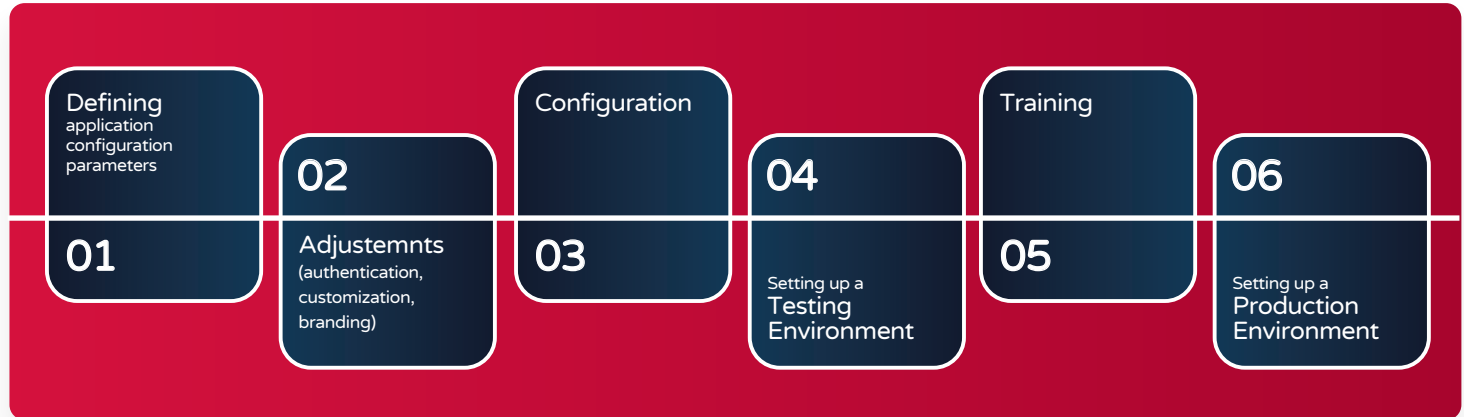
- Application users: entry/change/deletion of users (previous search of users from the AD); defining the application access rights, i.e. assigning of roles to the users; uploading of users' e-signatures
- Session boards: entry/change of the Session board, declaring the value inactive
- Permanent members of the Session board: entry/change/deletion of a permanent member
- Confidentiality levels: entry/change of data on the confidentiality level, declaring the value inactive
- Types of documents: entry/change of document type, declaring the value inactive
- Proposal forms



► Implementation steps

The solution implementation is carried out in six steps.

Illustration 32 | Execution monitoring report



1. Defining application configuration parameters – this step includes the mapping of the application parameters with values that are suitable for the client. This step is used to define the codebooks, users, settings relating to the client's environment (mail server address, AD parameters, etc.), additional proposal/session parameters, voting results processing algorithms, document templates, session workflow, etc.

2. Application adjustments – this step is used for possible fine adjustments of the application, changing the logo, colors (branding)

3. Application configuration – this step is used for setting the application based on the parameters defined in the first step. The testing of the application according to the defined parameters is also carried out.

4. Setting up a testing environment – this step is used to install the application in the client's test environment

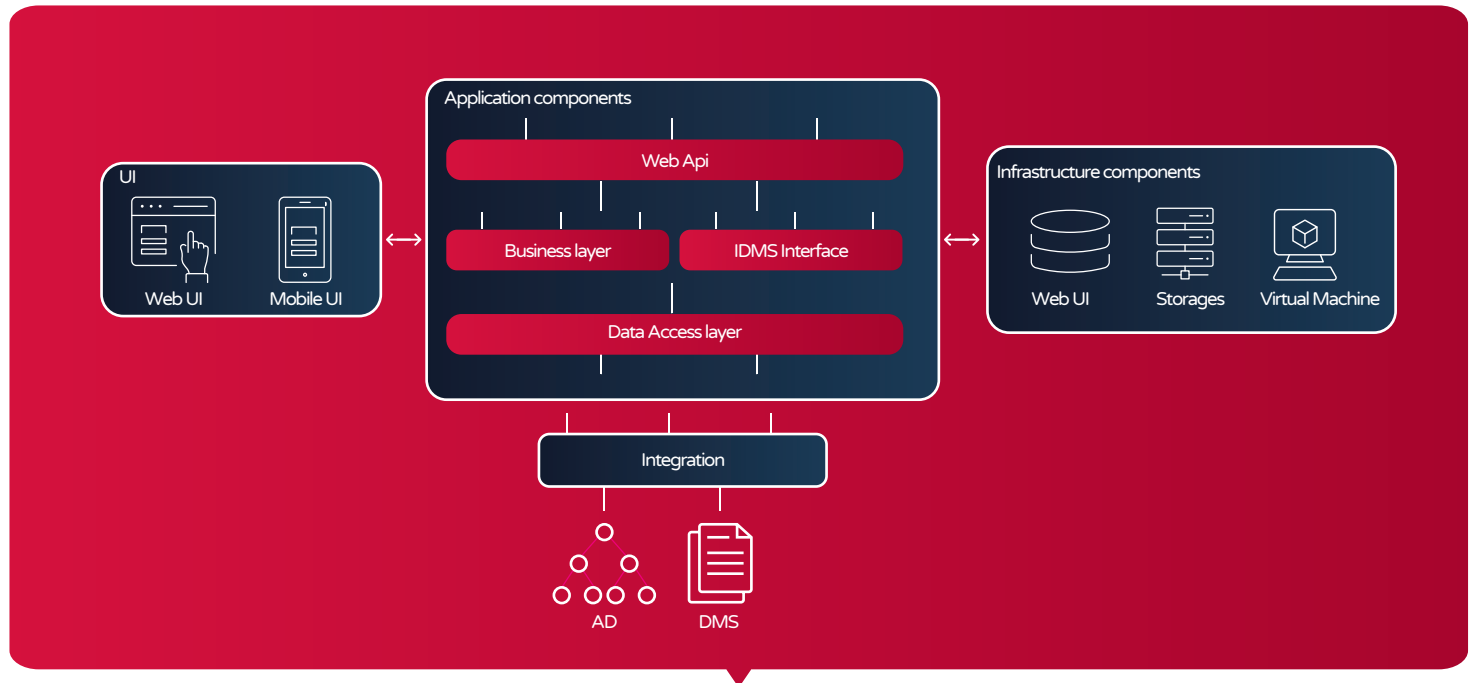
5. User Training – this step is used to carry out the training of advanced application users. The advanced users are then in charge of the training of the end-users of the application

6. Setting up a production environment – this step is used to install the application in the client's production environment

► Technical characteristics of the solution

The solution has been developed by applying modern technologies and design. The logic diagram of the solution's components is given in the image below.

Illustration 33 | Logic diagram of the solution's components



The user interface is made using the Angular framework, which achieves a modern app design appearance. Furthermore, the Angular framework ensures a mechanism of an adjustable user interface presentation, and thus the solution works equally well on PC computers, tablets and mobile devices.

The application components of the solution are predominantly created using the .Net Core framework. The architecture of this layer is granular and clearly separated into logical and functional units. A set of Rest APIs has been used for access to the users' layer. The Rest API layer relies on the business logic layer that implements the entire logic of the application functioning.

An IDMS interface has been developed as an additional business logic module. The IDMS interface enables the integration of the eSession solution with various DMS systems for document storage and control. By default, the IDMS interface uses the file system as a data repository, but in practice also uses other DMS systems such as SharePoint, Documentum, Oracle, etc. The IDMS interface can be additionally adjusted to support the client's DMS system. The business logic layer relies on the Data access layer to achieve permanent data storage.

The infrastructural components of the solution ensure the database and storage space. The solution uses an MS SQL server as its database, while the systems owned by the client are used as storage space.

The solution itself is designed so that it can be hosted on client's onPremises infrastructure or a private or public cloud. The hardware characteristics of the solution depend on several parameters and are defined at the request of the client.





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Definitions and abbreviations:

CTSI - Comtrade System Integration

AD - Active Directory, infrastructural element containing the data on the resources (human and hardware) within a single network domain

DMS - Document management system

