

PARLIAMENT@WORK

ACCESSING PARLIAMENTARY DEBATES IN THE ROMANIAN CHAMBER OF DEPUTIES

Because access to information, activities and debates that take place in the Parliament must make sense to voters, the Chamber of Deputies' website (<http://www.cdep.ro>) tries to answer the following question: how could we make proceedings in Chamber of Deputies easier to follow on the Internet?

On the other hand, the Chamber website attempts to fulfill the public need for a place where they can get a comprehensive overview of progress of a bill in the legislative process, with links to related documents (full text of the bills as initially drafted and reports), debates (text and video), and voting records.

Therefore, in order to answer the above question, we chronologically publish the following information on the Chamber of Deputies' website:

- Before the sitting: the agenda of the plenary sitting
- During the sitting (online): live webcast and voting records
- After the sitting (1 or 2 days delay): full text of the proceedings.

All above components related to a sitting (agenda, video files, voting records, and full-text), and issues under debate during a plenary sitting (bills, questions, interpellations, motions, etc.) are stored in the databases and they are connected so that to create a comprehensive access system to parliamentary business.

Before the sitting - Agenda of the plenary sitting

At the end of the week, we publish on the website the agenda of the plenary sitting of the subsequent week.

The web page that includes the agenda of a plenary sitting is not a simple text listing the issues to be addressed by the Chamber, but a list with links to documents or web pages relevant to those issues.

There are links to documents in an electronic form, such as reports, draft laws under Chamber consideration, etc. One year ago, following recommendations of the Committee for information technology and communications, the expression "electronic distribution of documents" was included in the Standing Order of the Chamber of Deputies. According to the Standing Orders, each MP may choose between the electronic or the hard-copy distribution of documents. A dedicated database was set-up for the purpose of electronic distribution of documents.

For each bill on the agenda of a plenary sitting, there is a link to the bill progress web page. Bill tracking system database generates web pages that include all the information related to the progress of a bill. The main stages of the legislative procedure for a draft bill (legislative initiative, examination in committees, debates in the plenary session, votes, mediation, control of constitutionality, promulgation of the law) until the day when the law comes into force or it is rejected, are recorded in the database. Each record contains general information (the date, the involved parliamentary structures, deadlines).

During the sitting (online)

Live webcast

The integrated conference system (which is a Bosch DCN - Digital Congress Network), delivers to the webcast service of the Chamber, digital video (SDI) and audio signal from the sitting.

The webcast service, based on RealNetworks Helix Server, carries live audio-visual coverage during sittings in the Chamber of Deputies since December 2003. The service is provided using a 100Kbit per second stream. This stream consists of an 84Kbit per second video stream and a 16Kbit per second audio stream. Although this is not a broadband, it provides the best quality to the largest audience at a reasonable bandwidth and with low costs.

The webcast is delivered across the Internet on the two most popular PC player technologies, Windows Media and Real Player.

In the case of speeches in foreign languages, the service provides two audio channels: one channel from the floor (the speaker) and one channel from the simultaneous interpretation system.

Since the beginning of this service, all videos are available through the online archive. Regarding the archived videos, the web casting service integrates a captioning facility, providing textual information to viewer of the current speakers and the business being discussed.

Voting records

After a voting session, the software application "Parliamentary voting" delivered by Bosch in its DCN - Digital Congress Network system, automatically exports the results of the vote to a DOS text file, placed on the workstation that initiates the session.

We developed and installed a software service on the voting workstation that sends these exported files to the Oracle database. At the database level, the vote of each Member participating in a nominal vote is loaded into the database. After loaded into the database, the vote results are available on the Internet web page dedicated to this purpose. On that webpage we display the MP vote option (YES, NO or ABSTENTION) or the absence of an option. For each Member, voting records are also published on the "How did the MP vote?" webpage.

In the preparation phase of a vote, the operator has to input the name and subject of the vote. Both are exported in the DOS text file. Based on the vote name, which acts as a code, vote records are linked to the bill involved in the voting session and they are embedded on the bill progress webpage.

Meanwhile, global vote results are closed captioned on the live webcast.

All the above actions are automatically performed (the whole process takes less than 5 sec.) During a sitting, anyone can watch the live webcast, access the web page with vote records, and see the nominal votes. Since we have implemented the online vote web page, we experienced its intensive use by media and by press agencies during important voting sessions of the Chamber.

After the sitting (1 or 2 days delay) - Transcript of the debates

Within one or two days after the plenary sitting, the stenography service produces a MS Word file containing the transcript of debates. The persons in the stenography service were trained to markup the text corresponding to items on the agenda of the sitting, and to use a specific style for speakers' names.

Based on markups and text styles, the software procedure that loads transcript of debates into the database and publishes it, first divides the text into records. Each text record contains information about the speaker and about the item on the agenda. Next, text records are loaded into Oracle database.

As a result, each text record in the database that contains a text paragraph from the transcript includes associated information about the speaker and the item of the agenda under discussion. Consequently, each bill from the agenda is automatically related to the corresponding text from the transcript. A link to the full-text of debates is embedded on the bill progress webpage.

Text-to-speech alignment

The last operation performed on text transcripts of the proceedings is the text-to-speech alignment that computes the alignment between textual transcript of the debates and the speech-based video-audio file. This operation is performed manually by using a software tool that we developed for this purpose.

The tool that performs text-to-speech alignment has the ability to load from the database all text records of the transcript and the corresponding audio-video file. The operator has to select the text record, listen to and watch the video-audio file, press START button (start time is memorized), press STOP button when the speaker ends its speech (video file is paused) and press SAVE button that makes start-stop times corresponding to the selected text record to be saved into the database. The process continues by selecting the next text record.

When text-to-speech alignment is finished, each text record of the transcript from the database contains, in addition to the relational fields

about the speaker and the item on the agenda, two new fields meaning the start time and stop time (in milliseconds) in the video file.

The time for text-to-speech alignment operation of the transcript is about 50% from total duration of the video file corresponding to a sitting.

Anyhow, some problems are arising from simultaneous speakers segments, when spontaneous discourse appears. The operator must handle these problems.

We use text-to-speech alignment for the following purposes:

- to include captions to the video material the webcast is delivering - video file and textual information (the name of the speaker, the item on the agenda) are streamed together;
- to webcast only some video-audio segments - on demand, one or more related video-audio segments (e.g. the same speaker) from one or more video files (sittings) can be joined together in a video clip and can be streamed once;
- to produce statistical data

Both Real Networks and Microsoft have developed captioning technologies for use with digital video.

Microsoft has developed a special accessibility format called SAMI, for captioning.

Real Networks' video player can display RealText, which can be used for closed captioning. RealText is just one of a handful of data types that can be played using a standard called SMIL.

As the result of text-to-speech alignment, the web casting service integrates a captioning facility, providing video and text streams simultaneously.

The SMIL example on the screen defines video region and two text regions (one for the speaker's name of and one for the item on the agenda). Web casting service automatically produces the SMIL output.

In addition, we integrated the text-to-speech alignment system with the web-based search and browse system in order to facilitate access to video segments. This is performed by using the same SMIL or SAMI technologies.

For example, someone who browses the transcript web page of a debate can just click a text paragraph to see and hear the corresponding video-audio segments rather than sequentially browsing or blindly tracing the timeline of the video.

Alternatively, any parliamentary business (bill, question or interpellation, political declaration, etc.) that was under discussion during one or more plenary debates can produce a webcast focused on it.

For example, someone interested in a bill can find, in the bill progress web page, links not only to related documents or to the full-text of the plenary debates, but also to the corresponding video-audio segments.

Based on text to speech alignment we can produce statistical data. These data can become answers to questions like: how long did it take the Chamber to debate on ...?

The Internet users can query the database to find out how long was the speech of an entire political group, of a Member, etc. Especially, this kind of information is very hunted by mass media for press articles with titles like "Who are the most silent Members?"

Plans for the future

We are about to extend live webcast to parliamentary committees' sittings, together with online publishing of committees' votes. This month we will start with three committees (Legal, Budget and Agriculture committees).