# The Use of the Digital Off-Air Radio Events Archive System EventsBNR in the Bulgarian National Radio

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**Abstract.** The paper describes the use of the system created for Digital off-air radio events archive EventsBNR in the Bulgarian National Radio. The system provides efficient application of modern information technologies in radio archiving.

**Keywords:** Digital Radio Archive, Multimedia, Radio, Culture, National Heritage, Databases

#### 1 Introduction

Radio archives consist not only of sound. Due to the diversity of platforms, which already offers radio production and the presence of large amounts of materials resulting from the events outside the studio of radio, which provided no means for inclusion in the archives of the radio is necessary to build additional type archive (primarily with images and video) and its integration in the existing audio archives. EventsBNR was design and created as a web based system that allows editors from the Bulgarian National Radio (BNR) to add and describe events. Each event can be described with items and keywords. The event archive allows access to multimedia documentary database of BNR in a planned online portal, where users with different levels of access can search the digital cultural heritage multimedia collections of the BNR. The system allows entering and searching off-air radio archive materials such as thousands of images, mostly photographs, of the Bulgarian cultural figures, and the large amount of material from the personal archives provided by different participants in BNR events such as contests, festivals, cultural salons, etc.

The paper presents some experiments and results of using the system EventsBNR by a team of editors in Hristo Botev Channel.

## 2 EventsBNR System

EventsBNR is created as a web based system that allows editors to bring events and multimedia elements associated with them. It accepts various searching mechanisms. It has been built after an analysis of different EBU radio archives [1, 2]. The system is comply with the European standards and technologies for creating and searching of

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multimedia objects in digital archives and methods to align metadata as determined by the European Union Radio and Television (EBU) standards [3]. The system has been implemented using Cake PHP MVC Generator [4]. There are different functions for the administrator, the editor, and the casual user.

The main functions of the system are:

- Creation of a new event
- Adding elements to an already existing event
- Finding an event
- · Searching by elements of the event
- Entering keywords
- System management

Simplified functional schema of the EventsBNR system is given in Figure 1. The whole system description is given in [5]. The event data are visualized by showing its elements (for images using thumbnails, for pdf files - their little copy). This is achieved by using ImageMagick®.

The main descriptors used in the system for describing an event are: ID, Title, Creator, Subject (Arts, Music, Society, Concourse, Festival, About (BNR), Description, Producer, Contributor, Date, Language, Rights, Keywords (can be selected up to five words from controlled vocabulary. The system administrator create, modify and manage this list), Repository for long-term storage – The Golden Fund.

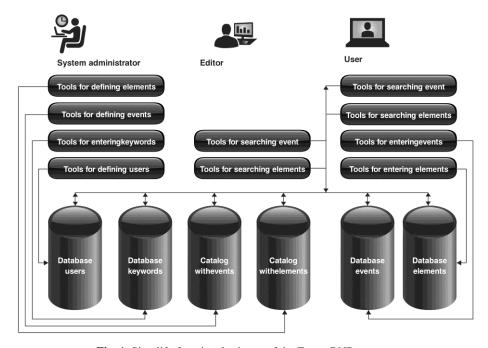


Fig. 1. Simplify functional schema of the EventsBNR system

### 3 Cases Describing the Use of the EventsBNR System

# 3.1 First Case: Defining the Event "Faces of the Music" and Entering Corresponding Data

On the eve of the National Day of the Bulgarian Revival Leaders November, 1the BNR Hristo Botev Channel hosts the project "Faces of the Music". Journalists and music editors collecting different materials carry out the preparation. The National Art Gallery, Sofia Art Gallery, Sofia National Opera, the National Center for Music and Dance, Svetlin Roussev Studio Collection, Boris Hristov Music Center, and Pancho Vladigerov Museum organize an exhibition. Before the event, we have already had information so that some of the items (elements) could be entered in advance in the system. First, the editor adds the event description and fills in the Add Event Page (Figure 2).

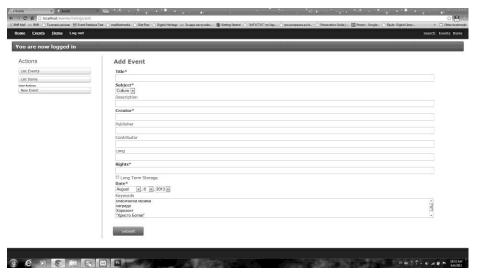


Fig. 2. Form using for Event Definition

After creating the Event, the Elements for this event are entered such as a text, images, and videos in different formats (Figure 3).

As results in the system several materials from this event (that aren't broadcasted so that practically none of it would be preserved in the current format of the BNR archives) are uploaded and preserved.

Different elements of this event are loaded into the system and they are ready for use by editors. Some of them are:

- Text files with the detailed information on preparation and organization of the event
- High resolution professional photographs of people connected to the event

- Photographs of prominent figures of the Bulgarian culture, music, and art taken during the event
- Text materials, decoding of audio files, extremely valuable material of the cultural heritage of our country
- Text and audio materials from the event with the voices and words of the participants
- Presentation in ppt format that can serve as a basis for the development of a multimedia product "Faces of the Music", including images, text and sound.



Fig. 3. Screen with added features for the event "Faces of the Music"

# 3.2 Second Case: Making a Summer Program Schedule of BNR Hristo Botev Channel

Each year, around the beginning of July to the first week of September Bulgarian National Radio works with summer schedules. Usually their productions are reviewed and the program schedules are similar with the schema in recent years. For this purpose, we search through different computers, e-mails, sharing memories of what it was last years, etc. By uploading individual items (ej.schemas from previous years) to the event "program schedule", we facilitate the work of the producers by preparing the new summer program schedule. Examples are given in Figure 4.

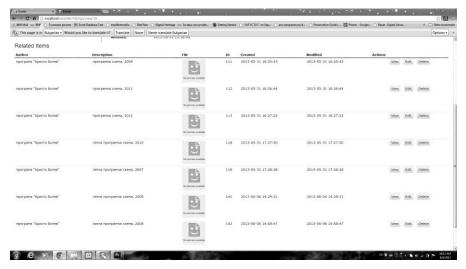


Fig. 4. Screen showing different elements in event "program schedule"

For a creation elaboration of a new summer program schedule, program producers can:

- Review the program schedules for the summer months in past years
- Seek for the past summer schedules (in the search box on items with descriptions).

Figure 5 shows the searching results for specific items in an event - in this case, in the event "program schedule" we search for "summer", "summers" and receive all summer programming schemas introduced as separate elements in the system.

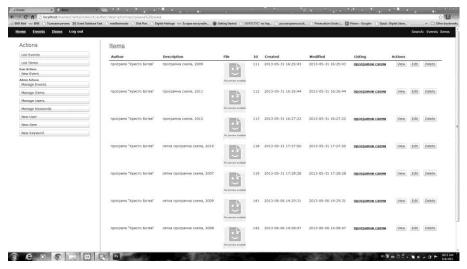


Fig. 5. Screen showing a search result of predetermined elements

### 4 Conclusions and Future Work

The experiments have shown that the system meets the requirements and greatly facilitates the work of the editors, especially for maintenance work on the BNR web portal. The integration of the system with the existing BNR archives is our future step.

#### References

- 1. Krandeva, A., Emiryan, S.: Access to the Sound Archives of the Bulgarian National Radio, In: International Conference on Digital Presentation and Preservation of Cultural and Scientific Heritage, DIPP2011, pp. 171-177 (2011)
- 2. Krandeva, A.: Cultural Heritage Archives on Bulgarian National Radio Platforms, In: International Conference on Digital Presentation and Preservation of Cultural and Scientific Heritage DIPP2012, pp. 234-240 (2012)
- Technical Report 003, Radio Archives: Conception & Practice, July 2009 http://tech.ebu.ch/docs/techreports/tr003.pdf; EBU – TECH 3336 EBU Refer-ence Data & Classification Schemes Source: ECM Status: Specification v.1.1 Geneva, September 2011, https://tech.ebu.ch/docs/tech/tech3336v1\_1.pdf
- 4. Cake PHP MVC Framework, http://cakephp.org/
- 5. Krandeva, A.: Digital Off-Air Radio Events Archive of the Bulgarian National Radio, Serdica Journal of Computing (2013) (accepted to print)