



## **Bold strides or tentative steps?**

# **How community broadcasters share and archive content online**



With the support of the Culture Programme of the European Union



The CAPTCHA project was a partnership of three community media organizations (Radio Corax, Germany; the Near Media Co-op, Ireland; Radio FRO, Austria) and the Center for Media, Data and Society (CMDs) at Central European University.

The project aimed to empower community media and programme makers to increase the online accessibility of their programmes. The project, which ran from September 2013 to August 2015, was supported by a grant from the Culture Programme of the European Union.

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## About the research

This report explores some of the challenges, obstacles, opportunities and prospects for online community media archiving, including best practices and lessons learned, to help improve the ways programming is shared, exchanged, and archived online. For this study, we spoke with a cross section of community radio stations across Europe and examined the online practices of many more.<sup>1</sup> Things we asked: How have successful models of sharing and archiving content online been developed? How are these online archives structured and organized? How is the work flow structured and who plays what role? What training, guidance, and moderation are needed and established? What technical capacities and other related issues do stations grapple with? What are the challenges in these respects, what practical solutions are being found, and what problems are not being adequately solved?

For the majority of community broadcasters in Europe, online sharing and archiving is still in an embryonic stage. Almost all stations feature a live-stream of on-air content, but for many stations this is the full extent of their on-line audio content. Some upload audio primarily in the form of attachments to articles or news items. Many others are still at a basic podcasting level: they upload shows, integrally, for listening back to, and post them as chronological lists or series of blog posts, with minimal if any categorization. With a limited extent of time and financial resources and the sector's deep and often emotive roots in on-air broadcasting as a medium, the person who told us that podcasting is something "we will take care of some day when we have a lot of time, and we still don't have a lot of time," probably spoke for a large number of people. We have, however, identified a number of interesting cases in which individual community broadcasters have gone beyond those practices, and this report focuses on highlighting how they have done so and what lessons can be learnt from their experiences.

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<sup>1</sup> See appendix for list of stations interviewed and researched for the study

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# CHAPTER 1

## Introduction

### Why share and archive community media content online?

Every day, local citizens across Europe are producing hundreds of community media programmes, creating a range of content of immense diversity. At a time of increasing concentration of commercial media ownership and strains on public service broadcasting, the work of independent community media plays as essential a role as ever. Their work bolsters Europe's media pluralism, empowers citizens, fosters social inclusion, enriches social debate and provides valuable training and skills.

However, many of the programmes they produce are only broadcast once and become unavailable to the public after that, since the mostly volunteer-based, non-profit, community media are especially likely to face limits and dilemmas when it comes to creating and managing online archives. The goal of the Captcha project was to empower community media to increase the accessibility of their content, by increasing their awareness and practical know-how about the tools and possibilities that are available now to share, archive, exchange and collaborate on community media content online.

We are interested in both the practicalities of how programmes can be shared online and in the wider role community media play in telling the story of our lives. Archiving community media content is a contribution to bolstering local and community voices, cultural heritage, and community dialogue. The case that there is an increasingly urgent need for community media to share and archive their broadcasts and productions online can be argued from two complementary perspectives.

### Changing patterns of media consumption

Radio is a vibrant and resilient medium with an impressive audience reach. Nevertheless, radio listeners - especially among younger generations - are increasingly likely to go online for news, music and cultural content, and are more likely to access



the content of traditional broadcast media online as well, whether through streaming live content or on-demand access.

These changing habits should be seen as an opportunity rather than a threat to the community media sector. Many community radio makers would like to see more people listen to, and share, their programmes. The future of radio lies online as well as on-air, and specifically in the form of on-demand media, even if the conceptualization of that change is mostly still framed in terms of podcasting. “For me, a radio station is not only anymore on-air, it's also a bigger thing.” Jan Hestmann from Radio Orange in Vienna said: “Radio [as something] that's only for right now is not really sustainable. People want to [listen] wherever and whenever they want, to listen only to what they're interested in. So I think the uploading and archiving becomes more and more important”.

## Sharing and preserving historical content

Sharing broadcast content online not only serves to find and serve audiences online, but also to publicly preserve programming and create a basis for online archives. The issue of preserving and sharing content online is especially important for community media, which do not have the same financial and organizational resources as commercial and public media, and who often need to justify their impact for funders, regulators and policy makers.

Many of Europe's public service media have developed extensive archives of historical content, both offline and online. The German Broadcasting Archive (DRA), for example, manages extensive holdings from both the consortium of public broadcasters in Germany (ARD) and the former GDR's radio and television broadcasting archive. Similarly, the holdings of the Netherlands Institute for Sound and Vision are by no means limited to the archives of the country's public service media, but those are comprehensively included. Community media content is not preserved on a common scale in any similar way. All output of the Irish public broadcaster is collected and preserved by the RTÉ Archives, but as the Broadcasting Authority of Ireland's Anne O'Brien told us, “outside of that there is no general policy and there is no collective approach,” which means that much material is “at risk of being lost forever.”

Jörg Depta of the community broadcaster Pi-Radio<sup>2</sup> in Berlin expressed his alarm at the prospect of lost cultural heritage:

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<sup>2</sup> CX-Zeitung, Radio Corax, May 2015

While the public service broadcasters enjoy the luxury of having their own archive at the German Broadcasting Archive, nothing will be left for historians 50 to 100 years from now from the “free radio stations” and their predecessors, the pirate stations, except for a few newspaper articles and the official documents from the state media authorities. Pirate broadcasters and “free radio stations” have played, and play, a very important role within the social movements, [but] only the “audio memory” of the public service broadcasters will remain in a few decades from now. When people would like to know, a few years from now, how themes like politics, culture, history and music were dealt with in the free radio stations, they will not be able to trace this if we don’t make the effort now to think about that.

## Aims of archiving online

When asked why they share content online, each station interviewed said the main aim was to **reach a broader audience**. While by no means the only reason, sharing programming across mediums, across borders, to the widest number of people is the practical, paramount motive.

What we are doing is trying to reach more people with high-quality content. And the people we're trying to reach are listeners, the people living in our broadcast area, and people outside our broadcast area, who are interested in the specific topic the feature is about. [...] The archiving is a byproduct. (Chris Wohlwill, Freies Radio Wüste Welle).

For many of those already uploading and sharing their audiovisual content online, it is merely another step of publishing content quickly: “The thing we’ve just done, let’s get it out!” (Near TV’s David Knox). Compared to the sometimes small broadcast audience for community media programmes, finding an online audience can exponentially expand reach and impact: “If I do a talk show with an artist about a cultural project, after six months, a video like that usually has 2,500 views – a remarkable amount of viewers.” (Dorf TV’s Otto Tremetzberger)

For community media, however, the desire to reach a broader audience is not an end by itself but a means. The point of uploading audio to an online sound library, as Red Nosotras en el Mundo does, is to harness the Internet as a tool of feminist resistance, its Argentinian coordinator Daniela Garcia argued. When the activists running the Red Nosotras site encourage local community broadcasters and women’s groups to share their productions with a potentially broader audience online, it is because they feel that the voice of these groups needs to be heard more clearly and more widely. They see the prospect of reaching a broader range of people – and especially, “absolutely,”

younger people – as one of the advantages of broadcasting online. They view the online format as a way to get the message out without many of the financial costs and bureaucratic obstacles that come with broadcasting on-air.

Even a local audience sometimes is not able to tune into a community broadcaster's regular programming. "In the last [few] years [...] the online aspect of Dorf TV is becoming more and more important," Otto Tremetzberger explained, because "many people cannot receive Dorf TV, they don't have a cable connection or they don't have a digital terrestrial receiver, so they use Dorf TV online." Some of Near FM's programmes have a regular audience of listeners who live or travel beyond the station's on-air reach: "I know a good few bands who still listen to that for what's going on in Dublin, but just as a podcast [...]. There is obviously a listenership that doesn't live in the area, there's only one way they can listen to it." (David Knox).

For the founders of Radio Kultura, reaching local citizens with an interest in the Basque country and culture is the station's primary goal, but they realized from the start that the internet broadcasting model meant it could also reach out to the sizable Basque diaspora. But most of all, the station described on-demand media as the solution for the fleeting nature of on-air broadcasting. As web radio station, Radio Kultura's mission was from the beginning "to make quality reportage that you can listen to whenever you want, so everybody can choose what they want to hear, at what moment".

### Archiving for reference and posterity

Even if the aim of preserving content for posterity is in practice often secondary, there is an unmistakable sense of passion and dedication about this purpose as well. "That's the history of Radio LoRa, this archive," said Songül Çiftçi. "We have to pass it on. If you don't know your history, then you can't know your proper goals, your future, that's true for radio as well."

Making past content available online can also help and encourage other reporters to follow up, added Andreas Reimann from Radio Dreyeckland: "I think it's important because I get mails from the audience or from other media as well, saying, oh two years ago you did an interview with this person, do you have the contact data, we want to interview this person". Having a well-structured archive can serve a practical purpose for the station's own programme makers as well. "For our editors it's important that they know, when [we're] reporting about squatting today, for example, and last year the same house was in the news, we can add the interview from last year to our report today," said Andreas, "so we can connect similar [items] to dossiers."

## Practical motivations

Stations expressed a number of further reasons for sharing and archiving content online as well. “Now you don’t need to [schedule] the same show two or three times a week so they can catch all their listeners, because they can upload it and [people] can listen to it whenever they want, said Radio Orange’s Jan Hestmann, which is especially important for a station when its programme schedule is already very full.

For one of Radio Corax’s websites, an experimental children’s site called hier-bin-ich.net, the learning process itself was the purpose, “to get the youngest generation into podcasting,” Michael Nicolai explained, “to activate them [into] doing it on their own, and being able to do it on their own”. Giving them “the chance to show their productions to parents, friends and whomever in the internet” encourages them to keep experimenting and learning.

The reason for uploading content can be as simple as giving people the chance to share their interviews with colleagues, friends or family:

In a community radio [station], you get a lot of people who've never been interviewed on radio before, so it's very much a personal [thing], and it's also unique to them. So to be able to share it with them after the fact - after the broadcast - is quite important. It's the same way like how, ten years ago, we'd just continually make CDs for people, because people would be like, “can I get a copy of that, because I want me dad to hear it”, or “I want my next-door neighbour to hear it”. Now people say, [...] can you podcast it? They might not even know the terminology of podcasting, they just say, can you get it up on the web somehow, and we say yeah, yeah we can podcast it for ya. (Near FM’s Paul Loughran)

The Red Nosotras en el Mundo Sound Library allows content creators in the network’s three production studios to share their broadcasts with each other as well as with community broadcasters from across Spain and Latin America – and those community broadcasters to share their own broadcasts with each other as well as an online audience. For them, too, the practice of sharing content online started as a way to replace the burdensome tasks of burning and mailing CDs.

There is usually a legal obligation for community media to preserve their broadcasts for a limited amount of time, and funders sometimes impose similar obligations, but these are rarely the primary reason why stations archive.

## How to start archiving

There is no one, single example of good practice in online archiving practices for community media we can refer to. There are, however, many best practice elements that can be sampled from each station's overall practice.

Throughout this report, we cite examples of individual steps community broadcasters took, specific strategies pursued, and particular tools applied, which worked well in their particular case and are worth taking into consideration by any other station undertaking efforts to share and archive content online. Several less successful experiences are recounted as well which can serve as useful warnings. We go in-depth to hash out a range of dilemmas and choices which community broadcasters face when launching or expanding their online archiving practices.

### How to start an archive or improve what you have

- How to create an easy-to-use, searchable online repository of programmes?
- How to digitize and upload some older material cheaply and organically, or find resources for a more systematic approach?
- To what extent can the design and development work be done by the station's staff and volunteers, and at what point does outside expertise need to be hired?
- What strategies can be followed to take into account that copyrighted music cannot be included online in the same way it can be used on-air?
- What steps can be undertaken, and which tools and resources can be used, to ensure the security of archived content?

### How to create a usable process

- Which sequencing of tasks works best; which selection of metadata fields best fits the station's model; and what can be done to make the uploading process less bothersome?
- Should volunteer programme makers be encouraged or tasked to upload their own broadcasts – and if so, what arguments work best? What training and guidance should be provided?
- Should a station upload whole broadcasts; shorter, topically specific segments; or both?

## Structuring content online

- Should archived broadcast content make up a specific part of the website, or should the website be built around the archived broadcast content?
- What priorities should be set in presenting archived content by date, programme or theme and topic, and how can those ways to access content be best interlinked?
- What audiences is the online archive really addressed at, and does it adequately anticipate their interests? How will the interests of an online-only audience differ from on-air listeners using the website as secondary resource, and how does the archive address them?
- If audio content is only available for some broadcasts, how can it be highlighted in navigation structures by date or programme, or presented, searched or filtered separately?
- In which cases is it a good idea to create separate, customized sites for specific programmes or content?
- When and how should, or shouldn't, a station use shared community media archives or external commercial services?
- How can community broadcasters adapt their online sharing and archiving structures to the requirements of the mobile age, and make greater use of visualization tools?
- Once content is shared or archived online, what are the best ways to reach potential users, evaluate how it is used, and interact with its users?

## What you should do depends on where you are now

Whereas some community media upload all their broadcast content and some consistently apply a variety of metadata (and those were not always the same), many other broadcasters are still only publishing rudimentary selections of content in blog-like ways. And those first steps are as important as the fourth or fifth steps of larger or more established community radio stations. The first important thing, therefore, is to tailor every step to your resources and capacities. This is how Radio Kultura's Mikel Etxebarria articulated it:

"At the beginning – and this was a very good thing – since we didn't know how hard the work would be that we were going to do, because we were doing something new, [...] we said, OK, for the beginning we are not going to try too many things. Because maybe we won't be able to manage them, and then it will be a kind of permanent headache. So at the beginning, on our first website, there were **only two choices**, I think: **reportages** and the **music live stream**, nothing

more. [...] It was a good way to start with this new kind of job. [...] In the second version **we added the music programmes** and we added also the **Basque language course**. And then each time, we just improved a little bit, but **knowing what we are able to do**, and without trying to do much more than we were able to.”

While taking on step at a time, however, the second important thing is to articulate at least in principle what the next steps might be, in order to build expansion-friendly structures. What do you want to publish and archive online, not just this year, but three years from now? Build for what you need and can do now, but make sure you don't lock yourself in archive structures, software solutions or media formats that are not easy to scale up later.

This is important to keep in mind in terms of weighing quality and quantity as well. From an archiving perspective, as Sandra Collins of the Digital Repository of Ireland suggested, the quality of data might be more important than the quantity of material, but from the more immediate, practical perspective of sharing content with your audience, focus will understandably be on quantity. However, it is useful to apply a minimum level of quality and consistency that will not need extensive reworking when the station does scale up its online sharing and archiving practices.

Larger organizations than community radio stations have faltered on that principle. The Europeana Foundation was so focused on a rapid ingest of great quantities of culturally important material in the first years of the Europeana portal, that it led to a situation in 2012 in which almost two thirds of the 27 million uploaded objects either lacked any rights information or had incorrect info about how the object could be shared or reused, Julia Fallon told the Archivaria 14 conference, and it took well over a year of work to fix.

Again, though, the first step is as important as the fourth or the fifth, and in the spirit of community media, one should boldly start from where one is now. We asked the women of Red Nosotras en el Mundo what they would tell a station thinking of getting into online broadcasting, and the response was: “That it's possible!” If there is conviction, if there is commitment, then this is a great opportunity; where there is a will, there is a way. The women who participate in Red Nosotras en el Mundo have no technical background, “but everyone can have a voice, don't let others speak on behalf of you.”

It would be an interesting thought experiment to wonder what the effects would be if Google extended its investment in digitizing the world's books to digitizing the world's audio heritage. But the community spirit of editorial, organizational and political autonomy requires the stations to take this investment on themselves, if their legacy is not to be left out of the history books – starting from wherever they are now.



## Using available models

As the Broadcasting Authority of Ireland's Anne O'Brien pointed out, "archiving is a very particular skill", even in the pragmatically defined way community stations are likely to engage in it, so it's important to "bring that expertise in" and engage in partnerships. Unlike in the pioneering days when some of the stations we used as examples in this report started uploading content, there is now a lot of experience – and as we found out, many people who are very willing to talk about how they did it. Even tips on how to write search engine-friendly titles and descriptions can be gathered from [fellow community media practitioners](#).

Every station will still need custom-made solutions, but there is a lot to learn from existing examples. Even when there is no national federation of community broadcasters to facilitate the exchange of expertise, it is worth reaching out to other community stations or other local media or organizations, or even looking at each other's sites together. When your station is well networked (inter)nationally, even the work itself can be pooled: the Tilos Rádió website was "[radically renewed as the result of an international collaboration](#)".

Any community radio station can rely on free, open source software to build its online structures; the Dorf TV website, for example, devotes a [specific webpage](#) to crediting the open source projects which made its model possible. Developing connections with local open source developing communities to support each other's work (and actively recruiting volunteers with a specific interest in software development) can be rewarding; too few community broadcasters benefit from the participation of software engineers like the Spanish community broadcaster CUAC FM does. As examples like calcms and RadioCo show, fellow community radio stations might themselves have developed relevant open source software.

In practical terms, online collaborations with other local or regional, non-profit initiatives can save time and provide additional features. Radio Wüste Welle's cooperation with My3so provides an example:

"They run one of the biggest online event calendars for the region, or two of the biggest, and they have a central event administration. And we joined that. So we have our own website, but we use the same event database as everyone else, [including] social-cultural centres, the Landestheater Tübingen ... Franz.K in Reutlingen, for example, is a partner, so we present three of their concerts each month. Before, we would have had to put those concerts up ourselves [on our website], and **now we just go into the central database**, we click on the



concert, and we say 'import' [...]. Since it is an event calendar, photos and the like [...] are always connected to the event, and we can connect journalistic content to the event. So if for example we interview someone who's going to have a concert in five weeks, and we connect the event in the database with that journalistic content, it shows up on all the other websites [too].”

## Scaling up

Scaling up your online archiving and sharing structures can become necessary as the scope of your content keeps increasing and you need or want to include new features. Periodically evaluating the features on your site and archive, reviewing whether they are still worth having and/or function as intended, can help avoid feature creep.

But scaling up is not without perils – and not only in terms of mishaps leading to loss of content in the process (see the section on data security). Ahead of scaling up, keep in mind the dilemma of what to do with existing, already archived content when introducing new features. Might you end up with some archived content being stored in one way, in one place or format, and other content stored somewhere else, in another way? How do you integrate old and new levels of content? Websites like those of Tilos Rádió (Hungary) and Near FM (Ireland) illustrate the risk that scattered archived content might create some confusion about what can be found where. The solution which Radio Student (Slovenia) applied, by preserving a copy of its previous website, remains imperfect because of functionality loss.

Issues surrounding scaling up also appear on the micro-level of info fields, categorizations and tags. Introducing new fields or categories, or splitting up or merging existing ones, poses the challenge of what to do with existing content. Any items that were added before the new field or category was introduced will not show up in searches or filters based on the new category without an attempt to re-categorize existing content. But going back and retroactively, manually re-archiving content is a daunting task, as these two anecdotes illustrate:

“The website we had before, [...] we **wanted to show people we had a very important archive, and that we have a lot of content.** [...] So we looked at all the archived material we had and which kinds of categories we could make [...] – adventure, art, travel, jazz, ecology, economy, solidarity, Basque country, et cetera. [...] We had to first see what we had done, and **then categorize them one by one** - it was a very hard work. I remember coming from a Grundtvig meeting, and in the airport working on the computer, categorizing, categorizing, and in the airplane also, categorizing... a lot of time. A lot of time. But, well, it was interesting” {Mikel Etxebarria, Radio Kultura}

“In our old system we had the problem that [...] we had **no structure for themes or topics**. So we started on the old website with tags. All the metadata about content, about topics, we did **with tags**. It was **not well developed**. [...] For example all regions, in the older website, were [added as] tags. [...] And then we migrated to our new system, and [we changed] some tags to topics. It was a lot of manual work. We had to create a list with which tag should be a theme, and which should remain a tag - or go to the region [field]... And it was interesting to see how it works, how to get, I think, 15-16,000 items into the new structure. [...] We had a list with 5,000 tags, with a lot of duplicates and wrong terms. [...] It was very interesting work because you have to decide which tag is worth to be a topic, and which is not so important and only a tag. It was **a philosophical work** <laughs>. I structured the world anew, of our website!” {Andreas Reimann, Radio Dreyeckland}

“This is a really big problem for historically growing archives,” the CBA’s Ingo Leindecker said, Some of these processes can be simplified with the right tool, he added. The CBA for example uses a taxonomy system in which a term can be moved into another taxonomy. If a new field, like locality or region, is created, an existing tag like “Germany” can be moved to that new taxonomy, with the effect that all content tagged with “Germany” automatically has that new field filled in, and doesn’t need to be recategorized individually. As Andreas’ anecdote illustrates, however, that can still leave a lot of manual work to be done when thousands of tags might need to be merged or moved.

## Issuing a challenge? A matter of priorities

Changing media use patterns mean that the community media audience, too, will increasingly migrate online, even if on-air radio continues to thrive as well. Sooner or later, all but the smallest stations need to embrace online as a function that is as crucial as technical maintenance, financial management or volunteer training.

Among many larger community stations, some of those latter tasks are already often done by paid staff, and sometimes staff with specific training or experience in that field. So the conclusion would seem to be that having someone on staff who is trained or experienced in web development and management, or hiring an external web developer or designer, preferably from within the station's circle of supporters, becomes as conventional a priority as having a staff person who knows bookkeeping or hiring an auditor for a funded project.

The example of CUAC FM shows that, in exceptional cases, it is possible to do everything as volunteers. Moreover, a small station with just one or two paid staff employees which is only just starting out uploading its first podcasts should not let anything discourage it from doing so. But in practice, stations that do a fair amount of online archiving often already have a specific person within the salaried team who takes on core design, management and/or dissemination work. If they have to squeeze it in between or after work that is considered more urgent, or more immediately speaks to their personal interest, however, they might never have enough time to get beyond the day-to-day tasks of uploading and managing content, resulting in mushrooming sites that organically grew into poorly designed structures. They might also have started as excited HTML enthusiasts with the DIY ethos of Internet pioneers in the 1990s, but feel increasingly challenged in the face of ever-changing technologies. Michael Nicolai from Radio Corax expressed some of these frustrations:

“For me, this **archiving and republishing is really coming from my job**. [...] To be honest, I’m not even interested in the Internet. I’m a local guy, I read books, I listen to records, so I’m really using this as my working tool. I don’t sit at home and surf the internet. [...] To be honest, I would like to **have somebody** in charge, as an employee of Corax, to do this, [someone] who **is really good in programming**, who **is really up-to-date with the current social networks** you have to use, and **how they should be used**. [Somebody] who is, [or knows] people, who are graphically good, so there is a package you can use, and it’s just a question of structure and communication how to make this efficient, the cooperation on this part of Radio Corax. That would be my dream. [...]. And this member of our staff could [then also] be the one who is training people, to do this more on their own and to be good at it. [...] It’s **a specialized field**, and you can’t ignore this, that there are experts for everything, and not an expert for everything in one person.”

A similar shift in scope is necessary at the level of individual programme makers, if a station is to comprehensively publish and archive its content online with some level of detail and categorization. Programme makers need to come to see radio-making as a process which includes archiving, sharing and interacting with your content online as much as researching your programme and broadcasting it live, on-air. An increasing number of them are likely to start doing so spontaneously, over time, but persuasion and training remain paramount. And as several examples in this report illustrate, even a temporary financial incentive in the form of some modest reimbursement can help kick-start the process.

If additional funding, as first priority, cannot be sourced, a shift in funding should not be precluded even within the limited budgets of community media, if that is needed to free up resources to pay staff, external developers or volunteers to create minimum key

structures and content. The aim would not be to replace the role of volunteers uploading their own programmes, but to scale up the scope and quality in which archiving is done: a larger core also facilitates a larger overall scope. Otherwise, if stations were already struggling to catch up with basic podcasting, and the web is meanwhile making another leap forward, the current under-capitalization of community media content on the Internet might only escalate.

## CHAPTER 2

### **Institutional and structural obstacles and challenges**

There are five areas which specifically pose challenges for community media, in ways and to an extent that commercial and public service media do not generally encounter: funding, working with volunteers, copyright issues, historical content, and capacity and data security.

#### **Funding**

There are hard costs involved in developing any kind of digital archive, and a public-facing, online archive in particular. Obvious ones that come to mind involve infrastructure: servers or server space and hosting costs. If anything, however, costs related to website design and management are commonly more substantial, and a major question for community media is to which extent volunteer engagement can substitute for those.

The nature of community media means that some traditional funding sources for broadcast media are absent or limited. Many community broadcasts do not air any commercial advertising, and choose to forego on commercial sponsors. Some stations carry some advertising, but limit the kinds of commercials they carry, or delimit the kind of sponsorship they seek. Red Nosotras en el Mundo, for example, is steering a path like this, trying to recruit commercial advertising in the form of ethically delimited sponsorships (which, in a word play on “patrons” or “patronizing”, they call “matronizing”).

Instead, a typical community broadcaster will rely on funding from a mixture of sources such as membership fees or dues; donations and fund drives, sometimes accompanied by special events or festivals; institutionalized, annual funding through national, regional or local state programmes or entities; one-off grants through state or European Union programmes; grants from independent and philanthropic foundations; and / or the sale of broadcaster-branded ‘swag’ (t-shirts, CDs, bags etc.). Calls for donations and funding drives are frequent and sometimes innovative. Radio Student listeners, for example, could donate a small amount to the station in a recent action by sending a text message.

## Specific funding for digital innovation and online content

In Germany, both Radio Dreyeckland and Radio Wüste Welle received funding through a digitalization-focused grant programme of the LFK, the Media Authority of the state of Baden-Württemberg. Although it involves a significant amount of paperwork, it is a fortunate opportunity, Andreas Reimann explained: “In Germany, media law is not a [federal] thing, it's state law. So in Bavaria you have a completely different situation than here.” Radio Dreyeckland has been receiving this funding for several years, earmarked for specific undertakings every year. Both stations have used funding from the programme to pay professional developers for overhauling their websites, which allowed Dreyeckland to switch platforms from Joomla to Drupal. For Radio Wüste Welle, the funding played a “key” role in relaunching its website in 2014, as “it would have been hard to come up with that much money” otherwise, Chris said.

Crucially, however, Wüste Welle also used LFK funding to pay editors of the local news program a modest reimbursement to upload the programs they produced, “to get it going” – and when that funding ran out after two years, those editors kept doing it on voluntary basis: “they said we don't care, we're going to continue”. In this way, the temporary availability of financial support kickstarted the practice, when those editors probably would not have been doing this work otherwise.

Radio Kultura was created thanks to specific funding for online development. When it became clear that there was no prospect of getting an FM frequency, its founders applied for funding through the European Union's Leader+ programme to create a bilingual media website. The two-year grant could not be used to pay salaries, but covered the infrastructure-related costs, from computers to server space, of establishing the web radio station.

### *Ireland: The Archiving Scheme*

The Broadcasting Authority of Ireland (BAI) manages an “Archiving Scheme” specifically aimed at promoting the preservation of broadcasting heritage. The scheme is primarily concerned with safeguarding historic material, especially material which is under threat because it is in a fragile physical state or stored on formats that are likely to be obsolete soon. The scheme is open to commercial, public and community media, as well as other organisations.

In the first round of the scheme, in 2013, €1.5m in funding was awarded to seven applicants, among which one community broadcaster, Northern Visions. Applying posed a challenge to smaller broadcasters like Radio Connemara, whose application in that round was rejected. Looking ahead at the second round, Anne O'Brien said that the BAI had expected more repeat applications, but "I think just the level of work that's involved in putting it together, I think they just needed more time." She explained that the BAI was "looking for people to come with projects with archiving experts on board," expressing a need to maximize results: "at the end of the day, it's best value for money".

Craol's Diarmuid McIntyre at the time expressed some misgivings about how the scheme was conceptualized, forcing different community broadcasters and partnerships to vie with each other over limited funding in "a competitive scheme" which "sets stations operating on parallel streams of development and fact-finding and discovery, while in their own silos, not being aware and not being able to build on the results of other stations." But the BAI emphasized that it was encouraging collaborative projects. Since applicants "have to demonstrate their archiving capability," community media should seek partnerships with people or organizations with relevant experience where needed, Anne O'Brien recommended.

The results of the second round will have alleviated some concerns about the accessibility of the scheme's funding to community media. Connemara Community Radio was successful with its second application and Near FM was among the other nine broadcasters and organisations receiving a grant. Overall, community broadcasters have received just over 10 per cent of the €3.8 million awarded over the two rounds.

## Working with volunteers

One of the characteristics which set the community media sector apart is its involvement of high numbers of volunteers, from often diverse backgrounds. This feature is in many ways a great advantage. Community broadcasters can rely on a large body of enthusiastic contributors, who are generally eager to learn. Both staff and volunteers are frequently driven by a sense of idealism, which fuels a strong role for spontaneous initiative, and a degree of personal commitment to the station.

The crucial role which volunteer programme makers play in community media also poses a number of challenges, however, specifically when building and adding to online archives. At some of the stations we interviewed, the process of uploading and managing online material remains the reserve of salaried staff or, in addition, interns and trainees who are paid for their work. But where the volunteer programme makers

themselves are relied on for uploading their own content, this creates a different set of conditions than commercial or public service media work in.

Reliance on volunteer efforts means, to some extent, being limited in the standards a station can set and the demands it can make, and having to largely rely on persuasion instead. The volunteers are making their programmes in their spare time, and taking on the tasks of uploading and categorizing - especially if those still have to be done after the actual broadcast is finished - can impose on the limited time they can set aside for their engagement with the station. It is therefore often up to the person or people who are most invested in the station's online presence to try to rally the interest of programme makers where and when they can. Many volunteer radio makers are in fact very eager to share their content online as well as on-air, Radio Orange's Jan Hestmann said, "but often they just don't have as much time resources as you, as paid worker, would want them to have".

The CBA's Ingo Leindecker summarized this dilemma: "This is probably the biggest compromise we face, in comparison to established or professional institutions [...]. We are always in the situation where we don't have this high quality of documentation, of metadata, because we can't force people to fill out lists and lists of stuff." In the end, the reliance on volunteers, many of them quite young or quite old and from non-mainstream communities, makes any large-scale effort precarious to some degree. "We would get a lot further if the people working at the station weren't worrying all the time about where they get their rent from," Radio Corax's Helen Hahmann said.

The wide range of ages and backgrounds among volunteers comes with greatly varying levels of digital skills and literacy as well, and the high turnover among volunteers poses an additional complexity. "We have 300 people here speaking 22 languages who make programmes," Radio LoRa's Songül Çiftçi explained. "It's really a very diverse group of people...some are diligent (about archiving), some aren't - but they still make good programmes." Some volunteers would need to start with very basic computer training, and this holds true as well for participants in job training schemes who work at many community broadcasters. "We need to take responsibility here," said Near FM's Paul Loughran, "you can't expect someone to come in and jump to podcasting when we haven't actually assessed where their given skills are and what training they need." There's definitely a generational side to why some volunteers take to podcasting their content "like ducks to water" and others "just want to speak, and play music" on the radio without much interest in the technological side or broadcasting online, Paul and his colleague David Knox agreed.



It also depends on what kind of show people do, Radio Wüste Welle's Chris Wohlwill added. While some programme makers use Spotify to create their playlists, there are also "people doing, for example, a jazz show, and they only use vinyl. So maybe they do some research online, but they do that at home and they bring it on sheets of paper."

The lack of in-house volunteers with backgrounds or skillsets that would make them eager to share and archive their material online, or even take part in developing the station's online structures, can also be explained by the volunteer recruitment practices. Although the open source community is similar to the community media sector in how it relies on volunteer efforts and a sense of idealism, few connections between those communities exist. "We're trying to make connections where we can," Chris Wohlwill said, mentioning his colleague Frieder Strohmaier who also works with LibreOffice, the free, open source office suite. "But it's definitely two different communities, there's no question about that."

CUAC FM and Radio Student are noteworthy exceptions. At CUAC FM, the volunteering work of software engineers helped the station develop new ways of automatically recording and uploading its content. But the lack of a greater number of such exceptions suggests that community media might have to engage in a process of reflection similar to the debate that has been roiling the journalistic world about how big data is changing the profession (see e.g. [The Big Conundrum: Should Journalists Learn Code?](#) and [Should journalists learn to code?](#)).

## Copyright issues

All but ignored in some places, vigilantly protected against in others, and problematic almost everywhere, copyright regulations play a major role in discouraging stations from uploading content. There is an urgent need for structural European reforms to create harmonized and flexible copyright solutions across the board, but especially for non-profit broadcasters. There are different legal environments in different countries; and almost everywhere they are inadequate for community media needs. For example, in the UK, the Canstream service provided by the Community Media Association allows stations to provide their audience with the option to listen to any recent programme online, but content is removed after ten months because of copyright limitations, limiting the lifespan of the archive.

*In their own words: The challenges presented by copyright rules and restrictions:*

*"This copyright thing is pissing me off. I think it's time – I wished that we had a*

*European organization of copyrights where all community media can be members of, and pay something to them, and avoid all this national shit.” [Rui Monteiro, Aarhus Global Media]*

*“Many editorial teams which also deal with interesting subjects don’t take part in the uploading. Because they’d have to cut out music.” [Radio Z]*

*“This changed license system [in Austria] I think will change a lot. [...] We already have music shows or shows that use more music that now say, ‘OK, now it makes totally sense and I will upload my show’. [...] It makes things way easier, and we really shouted out to [the programme makers], ‘upload, upload, now we’re freed!’” [Radio Orange]*

However, a recent agreement in Austria between the community radio stations and collecting societies has made a positive difference. Stations can now publish programmes which include copyrighted content online for a global audience for a lump sum, which was initially set at €12.000. There is also a limit to the global scope under the agreement, though: if use by visitors from outside Austria increases above a set maximum level (10% or over 35,000 visitors a month), a different contract would be needed. Despite its limitations, the agreement had an immediate effect: after the agreement was announced, member stations of the Austrian federation of community radio stations VFRÖ uploaded over 500 files in a single day. Radio Orange has organized workshops to inform its programme makers about the new opportunities and how the uploading process will now be simplified.

By contrast, the strict copyright enforcement regime by Germany’s GEMA collecting society serves as a substantive deterrent for community media there to share content online. Even if a band comes to play live in the studio, for example, if the band works with GEMA, the audio content cannot simply be published online. Recent changes to the German rules are an improvement but far from adequate. A new agreement with the GEMA allows community media to share all its content online, but for only seven days before and seven days after they are broadcast.

The new arrangements in Austria and Germany are the result of broad negotiations and long-term advocacy efforts by community media on a national level, which were in no small part made possible by the support and existence of national community media federations. In countries which lack such collaborative organizations, the copyright issue remains even more intractable.

## Practical strategies

Stations have chosen to deal with these challenges in different ways. Some elect to cut out all music content. Users of the Austrian Cultural Broadcasting Archive can use its cut-editor to do so, but the process remains laborious and the result imperfect. Others, like Kanal K in Switzerland, decide not to upload any music programmes at all, resulting in heartache among station managers and programmers when their websites do not reflect their specializations in music programming. Still, others are reluctant to encourage uploading of any programmes too much, especially if a station is too large for the staff to verify that no rules are broken in any of its content. There were stations which have been on air for over a decade which had uploaded very few programmes to the CBA before the new Austrian agreement came into force out of fear of copyright violations, despite an interest from programme makers at the station in uploading their content: “They don’t dare to,” the CBA’s Ingo Leindecker said. Another station uploaded part of its programming to the CBA, but didn’t widely promote that content as a station, leaving it to the individual programme makers to disseminate it: “let sleeping dogs lie”.

There were also stations which said that in their country, music content is unproblematic if it’s not the main subject or if it only constitutes snippets or background content, or took a more sanguine approach. “To be honest, if there are [parts of the programme] with foreign content like music, or something like original sounds from movies, we still don’t care about copyright at this point,” a staff person from one station said. “We say, OK, let’s publish it, maybe if there is someone who wants to fight against this, let them come.” At another station, the practice was to make sure that the metadata of an uploaded programme did not reflect any music which may have been included.

Another work-around is to upload programmes on a site abroad, in a country with more functional and less restrictive copyright laws, or a limited-access section of a site. This is again not a sustainable model, however, and creates a built-in precarity. Stations also might choose to play loose with foreign language content on their site that wouldn’t be as easily detected domestically. Other stations require programmers to sign terms and conditions vowing they are not breaching any third party’s copyright to limit their own liability. The CBA also has contributors sign an end license agreement, which makes the uploader responsible for any legal problem which might be an outcome of the uploading of the content.

“We have an end license agreement you have to sign in order to use the platform – the uploader is fully responsible for any legal problem which might be an outcome of that. [...] We are a host provider, which means that the people who upload the content are the owners and the publishers of their content, which means they are legally responsible. [...] Because otherwise it would lead to a

situation where one copyright holder claims something, and there is the threat that we have to close down the whole platform. [So the liability should be on the individual, but how an outcome would be in court is unsure, because there is no precedent case yet in (our country). It's not so sure that the radio stations might not also be considered partly responsible. We would prefer not to find out.”

This all points to the need for harmonized policies across Europe in general, but especially for non-profit radio stations. As long as copyright remains a disruptive issue, stations might have to change the way they prepare and create their programmes if they don't want to risk it precluding them from sharing a significant share of even non-music programming.

The problem [is that] the programmes themselves are made by people **whose primary concern is within their own station** and their own broadcast department. The station's management or programming committee might be interested in sharing and getting it out further, but the decisions that the individual is making with regard to the creation of that programming **do not go further than their studio door**. So the concerns around copyright, the concerns around all of that, **don't even come into play**. Because in their studio environment all those issues are dealt with. They have a license to utilize music whichever way they want to use it. It's when it goes outside that... So it comes down to [something] as simple as saying to you, if you introduce this over music, you cannot use it. So **it's the principles of the programme making that need to change**. [Craol's Diarmuid McIntyre]

### Legal and copyright status of community media content: Copyright, Copyleft and Creative Commons

Some stations have very clear terms of use between programme makers and the station, for example ensuring copyright remains with the programme makers, that stations guarantee that they are not using the content for commercial purposes, and that programme makers guarantee they're not abusing rights of third parties. Others take a more laissez-faire approach. Legal liability can emerge as an issue online when it would not have arisen on-air; in one example, Red Nosotras en el Mundo was facing a lawsuit from a fundamentalist catholic organization over two pieces it had published about abortion in its online archive. In its suit, the church explicitly argued that the content was harmful because, as online content, it would remain available continuously.

Those who upload content to the CBA or the programme exchange and archiving platform of the German community radio stations, Freie-Radios.net, commit to sharing their content under a Creative Commons license. The website content of Radio Wüste Welle is also licensed under a Creative Commons license (CC-BY-NC), while Radio

Kultura's Mikel Etxebarria said they were "more in the Copyleft approach". The most common approach, however, appears to leave the copyright status of the station's online content unspecified on the website, but in practice leave people free to use it. For example, Near FM's mantra is "as long as you ask us, and don't use it for profit, you're welcome to use anything that we do," Paul Loughron said: "That's pretty much our position on everything."

Near TV's David Knox, however, reported some negative experiences with people taking the station's material without crediting its authorship. "In the TV context it happens a lot," he said:

"People will download the videos and put it up on other websites and then promote it that way. [...] I've had [a guy take] a documentary and broadcast it as part of his channel. They should ask. We don't mind – I didn't mind people taking it, I mind people not asking. I would have said yes, no problem; not asking is not fun, or cool. It's nice to see where stuff is going. [Instead of embedding our content], they obviously went out of their way to use KeepVid or something to rip the video out of YouTube and put it up on their own corporate site, which was a little sad. So they promoted it through there – so it was a way of promoting their company – they could have promoted their company and also promoted Near in the process [...]. On Vimeo for example [...] you can denote the licenses, and we used to, but I kind of stopped doing it because people just kept stealing it and pretending it was theirs. [...] I don't mind as long as someone credits, but people don't use the Commons in the correct way."

Acknowledgement, or even proof, that other stations have rebroadcast a programme can also be useful as documentation for funders and PR. If other stations reuse content Radio Z uploaded to Freie-Radios.net, Michael Liebler said, "yes, that would be courteous, to leave a comment saying 'we rebroadcast it yesterday'."

German community broadcasters like Radio Wüste Welle take part in Zip FM, a collaborative broadcast, as well as other regular programme exchanges: "We are [using content from] Focus Sudwest and Focus Europa, those are two project editorial teams in Karlsruhe and Freiburg, we're broadcasting those, and we're broadcasting features from Freie-Radios.net on every Tuesday, Wednesday and Thursday from 5-6 in the Infomagazin." [Radio Wüste Welle's Chris Wohlwill]

## Historical content

Constructing online archives to make it easier to access, search and explore community media content implies the need to adequately archive this content in the first place, and this often starts in-house. The process of recording and preserving all current broadcasts was universal among the stations we interviewed, but the preservation of digital broadcast files does not necessarily mean that past content is archived in a structured way, or that it can be found back easily. Radio Wüste Welle, for example, is only starting to index its internal digital archive:

The way we now program the documentation server, which **automatically records shows** and then plays repeats on specific programmed times, is on a database, not a text file anymore. So we **now have the opportunity to try and at least go back to 2008**, I think, when we started putting the archive on a network drive and no longer on DVDs, and to start having an indexed archive for here. At the moment **you can't call it an archive** because it's **not really searchable**. If you tell me you want to hear the hour of broadcasting on June 14, 2005, from 6 to 7 PM, it's no problem to find it for you. But if you tell me you would like to listen to everything from 2005 that's about local politics, then I'm going to have a problem.

The situation of historical digital records is similar at Near TV, David Knox explained. “There are just tapes from shoots that are marked with 0001 and 0002, and there is an Excel file that isn't complete, but says [things like]: this was part of whatever tape one ... There is no logging information, so you don't necessarily know what's on it, but you know ballpark what programme it's involved with.”

The extent to which analogue historical material has been preserved – and in which state and conditions – varies widely as well. At the *What Is Worth Archiving?* conference, Gráinne O'Malley told the incredible story of the archives of Connemara Community Radio, a broadcaster in County Galway, in rural northeast Ireland. The station still preserves thousands of tapes with undigitized content from the period of 1995-2007, when they used VHS tapes to record audio because it was the cheapest alternative. Due to lack of space, however, they are stored in a converted shed of sorts, with limited protection against the cold or heat, and the material is at risk of degrading.

In addition, the station has preserved some 15,000 hours of digital material from since 2007. All these materials include some historically valuable recordings, such as personal memories of residents about the first Marconi radio transmission of 1905. The station's lovingly but improvised cataloguing of the material has taken the form of a



spreadsheet which records basic information about each broadcast, such as what subject it was about and what persons were featured.

This combination of diligence and improvisation marks the preservation of historical content at other community media as well. Radio Študent, in Slovenia, has one of the most impressive internal archives among European community media, containing some 40 thousand objects such as LPs, singles, DATs and magnetic tapes. Radio LoRa, as the oldest existing community radio station in Switzerland, has been uploading its programmes to its website since 2002, and its internal archive includes digital copies of broadcasts from before that time, as well as close to 5,000 cassettes and other analogue media with material from between 1983 and 1997. The archives of other stations have suffered from setbacks; at the Near Media Co-op, some of the historical material was lost or damaged in a flood. Moreover, analogue materials have not been preserved equally consistently at other stations. “We have a few cartons of stuff, but that's basically our archive,” one of our interviewees said.

### Digging things up from the archive

Perhaps more so with community radio stations than with other media, a lot of historical material may have scattered, and only survive in the hands of people who used to work at the station, people who were interviewed or listeners who recorded broadcasts at the time. Recognizing this, Radio Študent conducted an interesting experiment by “crowdsourcing” a fuller historical record of its recordings and practices, which Andraž Magajna recounted at the Archivia 14 conference. In a process it called ‘on-air ethnography’ (initiated, among others, by two Ethnography and Cultural Anthropology graduates working at the station), Radio Študent broadcast interviews with former volunteers, and shared photos of past radio tools from the station’s history online in order to encourage former volunteers to call in to live broadcasts and share memories. The station’s staff and programme makers recovered sound fragments which former volunteers and older listeners had preserved, and researched the 144 boxes of documental material from its pioneering years (1969-1983) which the station had collected and contributed to the Archives of the Republic of Slovenia. The final result of this project consisted of a set of special programmes which didn’t just feature just discussions with original crews, but also a reconstruction of the station’s first ever broadcast.

This was obviously an exceptional effort. In general, the community radio stations we reviewed or interviewed rarely go back into their internal archives, whether analogue or digital, to recover or re-air historical material. Nevertheless, some stations have tackled the challenge of opening up valuable historical material, whether it is by digitizing

analogue tapes, rescuing digital materials from rudimentary organized folders and carriers, or rebroadcasting snippets or entire programmes. Kanal K, a community radio station based in Aarau, Switzerland, occasionally picks shows from the archive to make a special programme with that material (Franziska Monnerat). At Radio Wüste Welle, the practice of programme makers sometimes re-airing or re-using historical content is used as an ad hoc approach to improving the station's archive as well. Whenever anyone looks up and re-uses a broadcast from before the time the station started describing material more systematically, that person adds in missing descriptions and information after all. That way, "we'll have some kind of searchable thing maybe in a few years," said Chris Wohlwill. A more comprehensive approach is impossible; "we don't have the people or the capacity to actually do something like this with the complete archive." Radio LoRa benefited from another example. Over the course of several years, the community broadcaster in Zurich received a grant from Memoriav, an association which strives to preserve the audiovisual heritage of Switzerland.<sup>3</sup> The funding was intended to help the station to catalogue and preserve historical broadcast materials from before 1997, which does not just suffer from the continuing deterioration of the materials themselves but also the increasing rarity of functional devices that can play them. When it comes to securing archives and increasing their accessibility, unlabelled, unorganized and incomplete collections of digital content can constitute as significant an issue as at-risk analogue material, however. Rebecca Grant, Digital Archivist at the Digital Repository of Ireland (DRI), stressed this point as well. Describing the DRI's priorities in its endeavour to build a trusted digital repository for the humanities and social sciences, she emphasized the glut which already often exists of digital content, in varying states and of varying quality, and in formats that may or may not be up-to-date:

It's very easy to think about digitalization projects and say, it's so great when you digitize new content, but there is so much content already existing that nobody is looking after properly yet [...]. I'd say that is maybe our main concern. But when you're looking for funding and when you want to engage with stakeholders, they want to digitize new content too - and we're happy to do that as well.

## Capacity and data security

Data security is an issue every organization and every broadcaster has to grapple with, but to the extent that guaranteeing adequate security involves financial resources, community media have to be more flexible than commercial broadcasters. The cost

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<sup>3</sup> Memoriav - Verein zur Erhaltung des audiovisuellen Kulturgutes der Schweiz, TON / RADIO: laufende Projekte, [http://de.memoriav.ch/html/de/home/son/projets\\_term.htm](http://de.memoriav.ch/html/de/home/son/projets_term.htm)



issue also emerges when it comes to issues of server space and hosting content, though our interviews suggested that this does not generally pose acute problems.

The people we interviewed or answered our survey specified various combinations of the station having a server or servers of their own, renting or using space on servers elsewhere, and making use of cloud services. David Knox, comparing the Near Media Co-op's arrangements with those of another community broadcaster which hosts all its content on its own server, reflected on the trade-off between autonomy and flexibility: "we pay a host to have us, so that's scalable" as an archive grows, he said, "but they'd have to buy new hard drives, they probably need more processing power, they need to build new computers as things get bigger. It's more manageable and cheaper to expand a hosting package than it is to build a whole new server."

A good eye for a deal remains a priority in any case, as Mikel Etxebarria remarked; Radio Kultura last year went from a contract for live streaming and podcasting with the Parisian company which also broadcasts the public French radio stations, which cost almost €300 a month, to a new partner which provides the same services for only €35 month.

### Capacity crunch?

Radio Dreyeckland's Andreas Reimann was one of the few who expressed some concern about a capacity crunch as archives grow in size. The new arrangements in Germany concerning copyright mean that all content, including the music programmes which make up a significant share of the content of most community broadcasters, can be shared online at least for seven days after broadcasting. But if the station wants to make use of this opportunity, he wondered, wouldn't it be better to make sure that all of that content gets properly archived, described, categorized in the database as well - not for seven days, but forever? "When you start with this," he thought, the size "could be very increased" and cause a capacity problem. Already, the station is experiencing some capacity issues - not concerning the webserver, but with the in-house archive.

Dorf TV's Otto Tremetzberger remarked on something similar, noting that "the problem with capacity is not so much the problem with the videos you see online, but of all the videos we have [in our] internal archive, with the materials used and videos of different types and qualities." Because of the station's structure, in which off-site producers are encouraged to contribute content to Dorf TV's "looped" broadcast programming by uploading it into its online system, "many people are producing and storing their videos" on Dorf TV's server and "working on their videos on our server." The station benefits,

however, from an arrangement with the local Arts University, which means Dorf TV can use its server infrastructure.

### **“It is only a matter of time before the next archive crashes”**

Stories about significant amounts of historical programming or archiving structures being lost because of failing servers, lacking back-ups, and misconceived or failed structural changes to websites were surprisingly frequent in conversations we had in the course of the Captcha project; usually second-hand, sometimes first-hand. “It is only a matter of time before the next archive crashes,” the CBA’s Ingo Leindecker warned in our interview. “This will happen.” Are all of a station’s files continuously being backed up, in multiple locations online, on back-up servers and/or on physical media? Can they be feasibly restored? As self-evident as the questions are, they are no less relevant.

The CBA itself experienced a crash in 2007, Ingo added, “which was almost the end of the archive if I wouldn’t have just made a private copy for another job.” Andreas Reimann could only confirm the importance of back-ups: “We had one case, years ago, that we lost data. That was a mistake. That was a big mistake”.

Upgrading or refreshing a site’s or archive’s structure and design inevitably becomes necessary as the amount of content grows, a station’s understanding of the site’s purposes change, new web features appear, cheaper solutions emerge, or users come to associate certain visual designs with outdated content. But several interviews suggested that the process of scaling up, relaunching or moving an archive or website is often when things go wrong and data gets lost, or malfunctions creep in. In one example, an interviewee bluntly recounted that “we had an older podcast site that we lost loads of material from. [...] It had shitload of stuff on it that didn’t get transferred across. [...] It just got lost. That was the explanation given – it just got lost.”

So how do different community media try to protect themselves against such mishaps? We asked, in the hope that the answers can be instructive for other stations as well:

- “We have plenty of safeguards, just in case – for example, even for the livestream computer, we have two other computers that have the same configuration and the same quantity of recordings. So if the hard disk of one of them breaks or somebody steals the computer or there is a fire, we can replace it very quickly, and we have copies in different places”. – Radio Kultura
- “All hours of broadcasting are automatically saved on a separate drive (the logger) but deleted on a six-month basis. We back up and archive the most

important shows, interviews and contents on both our playout system (Myriad), on our network Drives and online.” – Future Radio

- “Most of our data [...] is stored several times in different file sizes and qualities and also as source material.” – Dorf TV
- “We have two systems recording and storing our broadcasting 24/7, at 192kbps quality. Live programmes are also recorded simultaneously and recorded in our archive system. We have our own cloud server to store the data and files used for broadcasting. The software stores all changes made in the last 30 days in the file structure. There is a copy with this data accessible in several computers.” – CUAC FM
- “We have two archives. [...] We have our own archive, here in house, [...] and we have the same – 90% of the stuff we have here is also in Berlin on the web server [...]. And it's synchronized - when you upload something to Berlin, on our website, it goes back into our archive as well. It's like a back-up. [...] We also record our whole programme, hour by hour, [...] and earlier years for example are here on DVD.” – Radio Dreyeckland

The extent to which data can be secured depends in part on resources. The Digital Repository of Ireland, for example, applies a “federated storage model” which is made possible by the participation of several universities. Decentralized archives are more secure, but also “much more expensive”, Ingo Leindecker said at a discussion session at the CivilMedia 14 conference. And yet, his colleague Thomas Diesenreiter insisted in our interview, “it is becoming more and more clear that we have to change something in this direction as well, [and think about] what kind of organization we need to preserve the data we now have, to preserve all the archives we now have.” They are seeing it with the CBA, Thomas argued, as it gets “more and more professional and of course needs more and more money to run”:

Better server infrastructure costs money. And the question is, how can we set up an organization which in the long term will be able to preserve an archive like that, and I think that in some areas we should think **on a bigger level about cooperation**, as **free media stations and as well political activists**. For example long-term preservation. If you want to set up a system just for the CBA which helps you to **really do long-term preservation** of the data we have, the **costs are enormous**. Because you have to have duplicate back-up servers which are able to data-check if the data is actually the same data as the day before and so on, and it gets really expensive to do something like that, just for

one project. One thing I'd like to talk about in the near future is how we can maybe set up **some kind of foundation for preserving all this data.**

## CHAPTER 3

### **The process – Organizing the uploading, archiving and sharing of content**

One of the main questions we focused on in our interviews was how stations organize and manage their online sharing and archiving practices internally, in practical terms. Who was taking on the tasks of uploading and categorizing content, how were they conducted in practice, how were programme makers encouraged to participate in the process, and what training and information was being provided?

#### **What steps are involved? Editing the audio, categorizing content**

In the traditional, most common process, programme makers produce their broadcast, air it live, and then have to upload it, applying whatever description and categorization standards are in place at the station.

The first step, at least for some programmes at some stations, is editing the audio itself first. Copyright concerns often make this necessary: “Everything is edited, because music can't be in it, any GEMA music is forbidden,” Radio Wüste Welle's Chris Wohlwill explained. Tools to help with this process are rudimentary. As mentioned elsewhere in this report, the Cultural Broadcasting Archive's uploading process includes an optional “decantation” tool to edit out music from one's broadcast, which was especially necessary before Austria's community radio stations came to a contractual agreement with the country's collecting societies. It remained a laborious process, however, and the quality of the result was still “really bad,” one participant at the Community Media

'Future Workshop' 2014 in Germany said. "It was really not too easy to handle," Radio Orange's Jan Hestmann agreed.

Another reason for editing content can be a preference to upload smaller segments from a programme instead – or as well as – the whole broadcast, to make topical content more easy to find and more attractive to listen to and share. (See the "whole shows or part of shows" section in the chapter about what content stations share and archive online).

Some programme makers re-edit their broadcasts entirely before uploading them. Michael Nicolai was quoted in a special issue of the Radio Corax newspaper about how he does this:

I often edit and rework my interviews to make them snappier than in the 25-minute live version. Sometimes you can get to the point better in twelve minutes, so I publish only those twelve minutes and not the full interview. [...] The length might have been OK for [...] a live conversation, but hearing back conversations in a podcast is quite something different, so that also requires more pointed content."

At the Captcha project's final conference, [Radio Archives in European Community Media](#), practitioners from the Spanish community radio station CUAC FM explained how they make use of an automatic radio broadcast recording and scheduling system, [RadioCo](#), which records live shows automatically and publishes RSS podcast information online using pre-entered descriptions and categorizations about each programme. The software was developed for CUAC FM but they made it free to use under a copyleft license. Over the course of developing its current system, the station made use of Icecast free software to publish audio streams and the Darkice tool to automatically archive broadcasts as well as create the live streams, with the help of complementary scripts to manage the naming scheme. The automatic recording and uploading system means the station's broadcasting schedule has to be followed punctually, and every hour, between programmes, there is a musical interlude of a couple of minutes to make sure beginnings or endings of broadcasts are never accidentally cut off.

In an ensuing discussion at the conference, Radio Študent's Andraž Magajna and Makis Ananiadis explained how their station uses an alternative method. Radio Študent also deploys an automated, real-time system of recoding and archiving broadcasts, and to make sure programme recordings are never cut off inappropriately, an inaudible 20 kHz audio frequency is inserted whenever a new programme begins. An open source Python script written by Makis then detects that frequency and cuts the continuous

broadcast audio recording into programme-sized parts to make uploading and archiving easier.

Such sophisticated systems present promising prospects for other community broadcasters as well, especially considering how they have been shared as free software. But automatic recording and archiving processes also raise some dilemmas that are explored in the “Whole shows or part of shows?” section of this report. Descriptions and forms of categorization can be applied to individual broadcasts in this system, both beforehand (which also makes it possible to automatically include relevant detail in the attributes of the audio file itself) and afterward, on the web. But the system doesn’t lend itself well to publishing individual, shorter segments from a broadcast rather than (or in addition to) the hour-long broadcast as a whole. It also makes it harder for individual programme makers to opt out of the online publication process, or indicate that they’d rather have an individual broadcast left out.

The process of uploading and archiving content online can involve a range of combinations of description and categorisation fields, as illustrated in this report’s chapter about the content stations share and archive online. One dilemma which broadcasters and archives face is which fields to make obligatory and whether to require minimum content for any.

In its own, far more extensive, archiving endeavours, the Digital Repository of Ireland (DRI) has grappled with this question as well. “We actually started out with very few mandatory fields,” Rebecca Grant said in our interview, “and then we had feedback from Europeana saying, if you don’t make things mandatory, people don’t give them to you and you end up with really poor metadata that you can’t search”. But community media are no DRI, and the Cultural Broadcasting Archive’s Thomas Diesenreiter warned that making too many fields obligatory can backfire: “When you try to force people to enter more information by making more fields required, like you have to enter at least five tags for example, you will get [random, nonsensical] text and they will just type in anything, because they don’t know what to put in.” His colleague, Ingo Leindecker, chimed in: “Or they don’t use it at all anymore.” At Near FM they have therefore followed the opposite path: over time, the station simplified its upload form to just four fields.

Other decisions stations have made about categorization standards involve what combination of category and subcategory fields are included in the upload form and how they are combined, if at all, with tagging functions. Radio Dreyeckland, for example, introduced a tiered system of categorization, going beyond a mere distinction between categories and tags, though all of them are optional. Uploaders can choose from a list of “only 20 or 30” topics, Andreas Reimann explained, but only items categorized as

Politics, Culture or Music are accessible directly through the main navigation menu, so programme makers are advised to always use one of those three and then add additional topics (e.g. gender, migration) where appropriate. Separately, they have to fill in a geographic field (local, regional, national, European); they can fill in a field for persons who are interviewed or discussed in the broadcast; and they can add tags as they wish. Programme makers are instructed to check for similar, existing tags before using new ones, however, to avoid a proliferation of tags that are only used once or twice. At Radio Z, on the other hand, uploaders have to “select a category, and they can only select one category,” Michael Liebler explained. “When we started this software project, we discussed this – and I thought that it was good to make the people who upload the files [...] think about, what is this exactly, what kind of category is this? Tags, I think ... I mean, anyone can make up and define their own tags, and I don't think that's very orderly.”

### (Towards) an upload-first model?

The traditional process, in which programme makers air their broadcast and then have to upload it, in practice serves to discourage them from doing so, our interviews suggested. The use of automatic scheduling software, however, is mixing up this process somewhat. Describing broadcasts and individual segments becomes part of the preparation process, relieving the need to still take it on afterward.

This also improves the timely provision of information on the website, which can be updated automatically through the same scheduling systems. Before switching to its current content management system, Chris Wohlwill explained, Radio Wüste Welle “just uploaded the [programme] scheme every half a year, and [...] as the programming season went by, a higher and higher percentage of the stuff shown on the web was simply wrong.” Now, whenever “someone has programmed a preproduction, or there's going to be a repeat, [or] we have a live broadcast from somewhere,” that information is automatically updated on the website as well.

Versatile scheduling systems can facilitate the output of programme and broadcast descriptions across a variety of formats the station might require for different objectives. This point was emphasized by Milan Chrobok, of the German community broadcaster Pi Radio, at the [Radio Archives in European Community Media](#) conference. A station might publish (parts of) its programming schedule in a print magazine, on webpages, in automated feeds like RSS, in mobile applications, and on social media, requiring different formats for each. Pi Radio and several other German community stations use open source software called calcms, which allows broadcasters to manage all metadata of a show at a single point. It simplifies the process significantly, especially for



community media which are dealing with collaborative structures where many different people might have to work with info on the same programme, and they work at different times, and have different competencies.

Radio Kultura and Dorf TV have inverted their process altogether for at least parts of their programming. At Radio Kultura, the productions in its “Émissions” archive are uploaded first, and broadcast in the live stream later, if at all. At Dorf TV, several hours of live-programming per day aside, contributors have to upload their programme to the online system, where it is reviewed and approved or edited, for it to even be eligible for broadcasting. The online content, Otto Tremetzberger stressed, is also the pool from which non-live broadcasts are pulled; it's the way the station *generates* much of its programming:

In a way, the Dorf TV programme works upside down. It's not that we just archive programmes that have been broadcast, it's that you have to upload a video on our website, or we ourselves upload videos on our system, which is our website, and *then* it goes on air and then it is broadcast. So in fact **we create a video portal or an archive**, and that's **not just a documentation** of what we're doing, it's also **the pool of videos** we are broadcasting. So probably most of the videos broadcast at Dorf TV have been previously visible on the website.

The scheduling system, Otto explained, “is integrated in our website”. The Dorf TV developed it itself, using different kinds of open source software: “Usually TV stations have scheduling automatization software costing 20-30 thousand euro, very complicated and adapted for commercial uses; we thought that we should build something ourselves because we couldn't afford that.” The end result is that the website fulfils three separate purposes at once: it documents the station's past broadcasts, it's how programmes are scheduled and mixed into the on-air programme, and it's an additional means of distributing content.

One major advantage of upload-first models, whether only metadata have to be filled in beforehand or the audio itself already needs to be uploaded as well, is that it circumvents the problem of motivating volunteers to upload their content after the fact, which as we will see further below constitutes a major challenge.

### Internal design: Ease of use

Especially when working with volunteers it is crucial to make the uploading process as swift and painless as possible, both to avoid errors and keep people from losing their motivation. “There are two kinds of archives,” the CBA's Thomas Diesenreiter argued: “the ones which are generated by a central organization or archive, and archives like



ours which are generated by users [...]. And therefore we have to provide different tools for different people, because they have different backgrounds.”

Most stations are aware that a complex user interface can intimidate programme makers with varying digital skillsets. Even optional fields can add stress, Ingo Leindecker added: “You have to scroll and you get a bigger interface and this has a strong psychological effect”. Even if it creates a tension with the archiving value of elaborate detail, most community broadcasters therefore made the same decision as the CBA. “In the beginning we had to choose between two approaches: the one [where you] try to cover every way of how to use such an archive, [and the] way to keep it as simple as possible. [W]e decided to not provide a very differentiated input mask,” Ingo elaborated.

Nevertheless, the uploading and archiving process is still hardly always as smooth as it could be. Nobody in a subset of seven respondents from six different stations, when asked to rate how difficult they considered their station's uploading/archiving process, gave it a top rating. The three elements they variously identified as being most difficult or time-consuming were editing audio content before uploading, e.g. to remove copyrighted music content; the upload and conversion of the file itself; and generating metadata. One community media practitioner in Ireland confessed he barely ever used the Craol programme exchange site, because “it's so hard to use [...]. You go to the website and you don't want to be there anymore ... you're just, like, I can't be dealing with this.”

In fact, entire projects can stand or fall based on a technical flaw or glitch. “The problem is, because we developed it by ourselves, sometimes the software does not work as it should,” Radio Z's Michael Liebler admitted. “So an error might take place and they are frustrated, and this is a problem. Sometimes I see that something's broken, [but it might take] months before the information comes to me, and then I have to repair it, and in the meantime people give up frustrated.” At Winterthur's Radio Stadtfiler, Anna Tavernini recounted, uploading all the content produced by the interns is “a lot of work, and to upload something to our own website takes a lot of time; if the file is too heavy it doesn't work and you have to start again”. As a result, the station now often simply uploads content to the commercial Soundcloud service instead.

The operation of the CRAOL programme exchange site was seriously hobbled by an underlying design flaw as well, Diarmuid McIntyre recounted: access to the programme exchange section was not fenced off from access to the overall CRAOL site. “So if you have the login to the website, you also get access to all the stations' accounts, business plans [...]. It's not separate. Which it should have been.” In combination with the general

wariness of participating stations to let any programme maker upload content directly, this forced the site to work with a designated person from each station. “But once you restrict it to saying that it’s the station-nominated person [who has to do it], if the station-nominated person is then unable to have the time to upload ... then the system can start to break down.”

## Who does what? The role of staff and volunteer programme makers

Rare is the station, like CUAC FM, which runs entirely on volunteers. Most stations have some paid staff, however few, and they face a basic choice of whether to encourage volunteer programme makers to upload their own content or to keep the task within the staff team. Who is best equipped? Both models, we found, come with a number of downsides.

Radio Kultura applies a centralized model, in which the staff takes on the process of uploading, publishing and archiving all the station’s content, both their own and that of volunteer programme makers. “We do all that stuff,” Mikel Etxebarria said. “The volunteers come, they record their programme, and then we finish the sound, for example if the recording volume is not very good, and we prepare the few lines of introduction, and we decide more or less when it will be broadcast.” He added that “some volunteers ask to learn about editing, so we show them, and sometimes they record and edit themselves, but most of the work, we do it ourselves”. This approach results in descriptions of consistent length and quality. But it is unfeasible if the station is large, or the proportion of the number of staff on the total number of programme makers is low. “They have to do it on their own, we have over 200 volunteers, we cannot do it for all of them,” Radio Stadtfilter’s Anna Tavernini said. “We’re just doing the part for the interns and some special shows.”

Allocating scarce paid staff hours in an always improvising organization to uploading content may also not be an optimal use of people’s time. Any staff person taking on the task might have to do it alongside their ‘regular’ tasks, which can lead to online work being squeezed. Even if a specific person or persons are designated to work on online content – Radio Študent, for example, has its own (modestly) paid IT/web staff – they can focus more on improving the design of the online structures and integrating new features if volunteers take on the task of uploading the actual material. Looking forward, the prospects of being able to expand the scope of archiving content online are restricted if the work involved remains the purview of coordinators instead of becoming a team effort.

Finally, disconnecting the act of broadcasting and the act of uploading, describing and categorizing content does not necessarily make intuitive sense. In the end, after all, it is the programme maker who knows his material best. If the programme makers do not take on the task of publishing their content online, they are arguably also less likely to get involved in sharing the content through social media and interacting about it online with listeners. Conversely, some might upload their own material anyway, but use third-party services, like their own Mixcloud channel. In what appeared to be a unique case, at Radio Corax it was traditionally up to the technicians to take on the uploading work. Michael Nicolai explained the background, saying that “we’re divided into two teams, in a way, a technical part and a content part, and we used to have the structure that everything from our live shows was published afterwards by the technicians in the background [...] because we thought it was more efficient.” It often worked well, he argued, saying that “some of the technicians were really interested in the programme content and then it was really easy; in the best case you came out of the studio and got feedback from the person who was listening the whole time, and he was also really good at editing the things.” The practice is no longer feasible, however, because the fluctuation among the technicians is high, “and now it is more often the producers of the content themselves or our staff who is doing the upload.” A Radio Corax technician we talked with agreed that the process had not been working; it is unfeasible to have to listen to whole broadcasts, and combine that with all the tech tasks that need to be done at the same time. But because the technicians had always been doing it, he observed, it was now all but impossible to persuade volunteers to start doing it themselves.

## Engaging and managing volunteers in online archiving

The conclusion seems straightforward: programme makers should be encouraged to upload their own content. In fact, the very concept of what it means to ‘make radio’ needs to be redefined, to reflect the changing ways in which listeners engage with radio content, accessing it across various live and on-demand platforms. Publishing your programme online should become as much part of ‘making radio’ as broadcasting it on-air.

There are, however, a number of challenges involved in practice.

As described in this report's section on working with volunteers, reliance on volunteer efforts implies being limited in the demands a station can make, and having to largely rely on persuasion instead. While many volunteer programme makers are eager to share their content online as well, they often only have a limited amount of time to devote to their work at the radio station. Moreover, many volunteers will have come to the station with a specific affinity for radio as a medium, and not yet associate the act of

radio production with online broadcasting as well. Engaging volunteers in the process of uploading their content can therefore be a challenge, and it can be part of a broader effort to cultivate an archiving culture at the station.

If stations relied on volunteers to upload their own programmes, we always asked what strategies and pitches were most effective. “I think what convinced them the most,” Radio Stadtfilter’s Anna Tavernini said, “was when I told them - look, for you it was that much work, for half an hour of a radio show, which was broadcast once and then it is over. Why don't you try to preserve it, then it's still there and you feel like all the work you have been doing has a larger impact.”

Being able to reach a broader audience was a staple argument. “Sometimes I summarize it, statistically,” Radio Z’s Michael Liebler said: “I tell people how much a programme is downloaded. Like, the most downloaded programme from 2002 was downloaded 8.000 times. Which was four times the number of listeners that heard it on the radio.” It doesn’t always work, though, according to Radio Dreyeckland’s Andreas Reimann. “We tried” the argument that you can reach a bigger audience, he said, “for example, that the Chinese hour could also be interesting for people in China. Or the Persian hour could be interesting in Iran. And ... it's difficult.”

Others use more of a show-and-tell approach. Jan Hestmann of Radio Orange explained that the station’s mobile app “is another instrument to show them, ‘if you click here you have your show, and now there's an empty space, and there could be information, and if there is information maybe people would be more interested in your show, and we could also spread it’. Radio Wüste Welle’s Chris Wohlwill combines an appeal to the station’s cause with the promise of more prominently featured content. “We tell them that [...] they can help out the radio by making the website more colourful and more interesting,” he said. In addition, if programme makers write up descriptions about their broadcasts beforehand, those “will be featured more prominently in the days before the show, so you also get the chance of gathering more listeners”.

Nevertheless, the managerial investment that can be required in prodding and reminding volunteers may make it feel not worth it to some. “To be honest, in this situation where volunteers are working, and rookies are working in the staff and doing all the things for the first or the second time, I can do it a hundred times faster,” one station’s coordinator said.

With a high turnover among volunteers, who might also not consistently have the same amount of time available, relying on them to upload their programme also means discontinuities and inconsistencies in what gets uploaded. Andreas Reimann cited the

station's Chinese programme as example. "They started, I think three years ago, to upload it, and I think they did it for four-five months, and then it was too much work."

The great variation in levels of digital literacy among volunteer programme makers, who can come from a wide range of ages and backgrounds and are relatively often from disadvantaged communities, means that not all of them will be equally comfortable with the process, even when some training is provided. Relying on volunteers to upload their own programmes therefore comes at a cost in terms of the consistency in the quality, character and length of descriptions, and the usefulness of categorizations and tags.

There are "many inconsistencies and gaps" in the items on the Near Podcasts site, Paul Loughran said. "For example, do they know how to pick categories properly, do they write enough information, [...] do they give a very clear title to the post, do they give the most important and most relevant information, do they tag." Writing user- and search engine-friendly titles and descriptions is a skill that needs to be honed, and David Knox outlined some useful advice in [an article on the Captcha website](#). So is choosing the right tags. For example, one broadcast was uploaded to the Near FM site with the tag "Mammograms in Ireland," which is unlikely to be used again and serve a purpose in finding back programmes or exploring related content. The quality of metadata at Radio Wüste Welle is "very different in the editorial teams that have guidance –if there is a staff member in the editorial team, and they help the volunteer journalists" than with other shows," Chris Wohlwill noted. Considering the fluctuating volunteer population, relying on programme makers themselves to archive their content online requires a continuous investment in training and guidance.

Some technical shortcuts exist to help ensure consistency and quality. An easy place to start is to make sure the tagging feature includes an auto-complete function, to reduce the number of redundant tags. "Our last system did not have an auto-complete function," Radio Dreyeckland's Andreas Reimann said, "so we had a lot of wrong terms." At Dorf TV, an apparent lack of an auto-complete tool (or its application in practice) last year still lead to search queries for different versions of the same word (e.g. "Frau" vs. "Frauen") yielding different results, but the search function featured a smart tool which suggested alternative spellings and related words if a search query yielded few results. The Red Nosotras Sound Library demonstrates the risks of adding further categories without a system to check for similar, existing themes; at the moment different posts in the library are variously categorized with the themes "Agresiones sexuales", "Violaciones sexuales", "Violencia sexual", "Violencia de Genero", and "Violencia contra las mujeres". In addition to using an auto-complete tool, a station can force the uploader to choose from a limited list of options. If there is a country field, for example, a list of global entities can be imported to avoid instances like on the Red

Nosotras site, where the advanced search menu reveals two spellings of Western Sahara and an errant “Psychology” option in the countries field.

Few stations have the resources to review content before publishing it online. Dorf TV, where content goes online before it is broadcast, has a formal two-step approach in place where content is not published online, or added to the ‘user-generated’ part of the station’s broadcasts, until the programme director reviews and approves it. But this is partly a feature of the station making it possible for any registered user to contribute to its video portal; broadcasts that went out live are not reviewed before they are published online as well. Elsewhere, neither broadcasts nor descriptions of individual broadcasts are systematically reviewed; the practice seems to mostly be to provide guidance or training, and trust the results. “It should be a role for someone [to] maintain it, just checking the consistency of posts, and making sure [...] stuff plays, because it only takes one dot in the wrong place for your file not to play,” said Paul Loughran, but in practice it is unfeasible.

At least two stations, however, make a distinction between content that is published online and content which is highlighted specifically on the homepage. “There is no ‘border’ or something like that, someone who checks [content before] it gets public,” said Andreas Reimann. “Everyone can upload.” But the station’s current affairs team “decides which items are good for our front page, [...] and which ones are not so important.” At Radio Wüste Welle, content which programme makers upload “goes straight online,” Chris Wohlwill said, and it is shown on their programme’s blog straight away. But they can indicate that they want their upload featured on the front page, and in that case the item is reviewed first: “whether the abstract is filled in and interesting; whether there is a photo that is also cropped right; whether the text is not too short; and that there are no problems with copyright.”

Considering the challenges involved in leaving the uploading and online archiving process entirely up to the volunteer programme makers, a number of stations have in practice adopted a hybrid model, where some of the volunteers do some of the uploading, but designated people in the salaried team do the rest. In general, the way broadcasting content is uploaded, archived and managed is often not as much governed by structured workflow management as rather organically grown processes and ad hoc improvisation. Near FM’s Paul Loughran explained: “We’ve been trying to encourage programme makers to podcast over the last few years, as much as possible - so we try and give programme makers the skills to podcast, or we will podcast for them. [...] I’d say there’s probably 50% that would always be asking someone else to do it and another 50% that go and do it themselves”.

## Training and guidance

We have come across wide variety of ways in which community media provide trainings and guidance to their volunteers about uploading and archiving their programmes online.

Sometimes, information about the process is included in the basic radio training that is usually obligatory for all new volunteers. Other times, it is tackled in separate web trainings, organized on a regular or irregular basis. At Radio Wüste Welle, participation in a two-hour workshop on the subject is tied to the right to have one's programme published online; "only people who did the workshop are going to be able to [add content] on the website," Chris Wohlwill explained, adding that, at the time of the interview, some 68 of the 140 or so adult presenters at the station had taken the workshop. Participation is not obligatory, however, and some programme makers were never going to take it: "there are people here who don't even start the PC when they're in the studio. They come in, they turn on the light, they switch on the mixer, and they use their CDs and their voice and that's it. And to make these people do the website workshop when they have never visited [the site], even passively, doesn't make any sense."

Not all stations provide such services, however. At Radio Dreyeckland, university students who conduct their internship at the station receive a number of workshops, which also cover working with online content. But otherwise, Andreas Reimann said, "we never have cross-media workshops. We have trainings on how to make radio, but we don't have trainings on how to make online content. So we have some rules – but no one learns how to write an online teaser or something like that".

Instead of organising workshops, or in addition to them, some stations rely on one-on-one personal guidance and feedback. Dorf TV organizes no special workshops, but its upload can walk online contributors through the uploading process where needed, while at Near FM, the same thing might take place in person, when needed: "you would have someone to sit with you, to talk you through the process". At Radio Corax, the basic training for new volunteers includes a part where they are shown the station's websites and archives and how to use them, but it "is on a really basic level," said Michael Nicolai. "Part of my work is to train the editorial staff," he explained, and showing them how to upload material, categorize it and write good descriptions is part of that. "To be honest, this is really informal."

Promoting an archiving culture among a station's programme makers, and increasing a sensibility for making sure that broadcasts are not just uploaded, but classified well and

described in an informative and engaging way, can also be a matter of making sure volunteers receive regular feedback. If programmer makers at Radio Wüste Welle publish an article on a recently broadcast or uploaded programme and indicate that they would like it to be featured on the station's homepage, Chris explained, a staff member reviews the item, and if they decide not to highlight it on the homepage "we write them and explain why, so they can change the article, and then it gets on the front page" after all. "We don't want to engage in censorship," he stressed, and the item would remain online in any case, but at the same time "the front page of the website is also a little bit the digital face of the radio station".

The scope for such feedback processes depends on the size of the station, however. At Radio Orange, with its 450 volunteer programme makers, staff will help volunteer programme makers with writing the general description of their show, which they must supply for the website. But providing descriptions for each individual broadcasts remains voluntary, "because you can't force them to write the descriptions," and there is simply too little time for going through all the broadcast descriptions and making sure they are adequate. "I mean, I go through the programme regularly," Jan Hestmann said, "but it's not possible to feedback all the descriptions, on every show."

Several stations, like Red Nosotras en el Mundo, Radio Stadtfilter, and Future Radio in Norwich, the UK, have prepared manuals or written instructions for programme makers. At Near FM, three pages with a step-by-step guide on how to podcast are posted on the wall of the studio. The Cultural Broadcasting Archive provides a 16-page handbook [for uploaders](#) and a separate one for [station managers](#).

What form training and guidance takes also depends on the station's volunteer base when, as mentioned, it can encompass a wide range of ages, backgrounds and levels of digital literacy. Near FM benefits in this context from a synergy with the Near Media Co-op's community computer skills trainings.

In Latin-America, the coordinators of Red Nosotras en el Mundo in El Salvador and Argentina soon discovered that tutorials alone are hardly adequate when working with frequently IT-illiterate women in rural and indigenous communities. So instead, coordinators travelled to women's groups in Nicaragua, Guatemala and El Salvador to train them not just in uploading content, but also in how to write effective articles and use websites as information resource. At the same time, they used such occasions to make programmes and record interviews locally. Other times they organized workshops in their own offices or those of women's groups they collaborate with, and they provide one-on-one follow-up support, walking someone through each step of creating online content when necessary. This is no chore, they emphasized. They described these



processes of training and guidance as the most enriching part of their work, seeing it as an opportunity to create and strengthen bonds and communities.

Since there is a rich variety of forms in which training and guidance is provided and volunteer programme makers are engaged in the process of uploading and archiving their content, and at the same time every station is more or less developing its methods and materials by itself through trial and error, there could be a real benefit in establishing some form of collaborative, train-the-trainers programme. The individuals at different stations who are most involved in designing these strategies could exchange experiences, provide feedback on each other's methods, and develop complementary or common 'best practice' modules.

### How much time is involved?

Depending on the size of the station and the amount of content it produces, its website might feature new audio content every hour, every day, or only every few days. Process-wise, it can also differ from station to station how long it generally takes for the audio of a newly broadcast programme to appear online.

Broadcasters using automatic uploading systems which immediately publish all new uploads will feature new content on a non-stop basis. At other stations, the process might take considerably longer. "Sometimes, it's on the website the day afterwards," Radio Stadtfilter's Anna Tavernini said, "but as people also have other duties, sometimes it's one or two weeks afterwards before it's online". At stations where it's not the programme makers themselves who upload their programmes, the time between broadcast and online publication seems to have as much to do with internal wrangling for the content as with the task itself. It led a staff member of one of the German community radio stations to remark that the new agreement with GEMA, which allows for publicly sharing recent broadcasts online for seven days after broadcasting, is of limited use for them because it sometimes already takes close to seven days just to get the file and descriptions online.

How much time the process takes doesn't only depend on the timely availability of the people involved, but also on how much time is spent on preparing the information and the audio itself. "The process of publishing a show in really good shape could be one-two hours; just publishing it would be 15 minutes," responded CUAC FM's José María Casanova through our survey form. Andreas Reimann from Radio Dreyeckland describes the full process: "I worked on the [film programme], it's one hour, and we have, for example, four or five interviews, and part of this was live. So I have to cut it from the recording of the broadcast, then I have to upload it, then I have to write a

description, I have to search some pictures, I have to put in the metadata ... I would guess more than one hour, to two hours work, only to upload it ... A lot of time.” All in all, Radio Kultura’s Mikel Etxebarria estimated, “adding content to the Internet page would be 10% or 15% of the time, maybe” of each staff member.

## CHAPTER 4

### What content do stations share and archive online?

The amount of past audio content and information about this content that is being made available on community media websites varies widely. It depends greatly on the specific structure that is chosen, and the purposes which it fulfils.

The forms and stages of sharing content online we encountered ranged from the minimal to the sophisticated, including:

- Non-archive: Livestreams
- Non-audio: Descriptions about programmes and individual past broadcasts
- Webpages with incomplete selections of embedded or linked audio files
- News items which might or might not have audio files embedded or attached
- Playlists with a limited number of most recent broadcasts
- Podcasts presented through external, commercial sites like Soundcloud or iVoxx
- Programme sharing on community media 'umbrella' archive sites
- Blogs which present new broadcasts as blog posts with minimal if any categorization
- "Listen again" or "Missed broadcast" sections with no or minimal categorization
- Archived, categorized content only for individual programmes
- Subsites with structured archives on a specific programme, theme, or project
- Mixed-content archives where text info about past broadcasts is categorized but only sometimes accompanied by audio files
- Podcast sites where posts include some form of categorization and can be searched
- Structured archives in which audio content is categorized in a range of fields, with advanced search options.

Two distinct models frame the range of the more elaborate examples. On the one hand, stations like the public access media service SALTO in Amsterdam, the Netherlands, make all past broadcasting content available to listen back to, by date, for at least a limited amount of time, but without providing any information about individual broadcasts or making an effort to tag or categorize them. On the other hand, quite a few stations systematically describe and categorize each past broadcast within specific structures by programme and date, but only occasionally include the audio of the programme.

In practice, there are many variations between those poles. Some of them are relatively plain: Tilos Rádió, for example, presents audio files that can be listened to inline as well as downloaded for every past broadcast, but information and categorizations are mostly only provided at the level of the programme, not for individual broadcasts. Other sites, like the Cultural Broadcasting Archive (CBA), come closer to the full archive experience, in which all items include audio (or items that include audio can be accessed or filtered separately), and each item is individually described and categorized in a range of ways.

## The development process

The process of how stations we interviewed developed their current online structures for sharing and archiving content included some instructive examples.

Many community radio stations first went on air already back in the 1980s, and some of them started experimenting with uploading audio and broadcasting online early on as well. Radio Z, for example, started featuring short snippets of on-demand audio from 1999 onward, Michael Liebler recounts:

I was very fascinated with the Internet as a medium, I wanted to do something with it. When I came to the station, it had a very small site, with an address and telephone number and such, so I started to play around a little with this site, and to upload audio ... this is for me very interesting, from my personal history.

Radio LoRa started uploading as well as live-streaming its full program in 2002, using a model which has remained essentially unchanged since. The broadcasts in its archive are still uploaded as Real Media files -- a dominant streaming format in 2002 -- which require downloading a special program like Real Alternative to play.

Many of the community broadcasters who were among the first to upload audio content online felt they were pioneering. Radio Kultura's Mikel Etxebarria felt this was still the case in 2005:

Most of the radio stations [now], they have their own website, and on their website they integrate also most of their shows, but at that time it was not like that. We were one of the first radio stations in the Basque country that had a kind of archive, where people could choose what they wanted to listen and when [...]. When we started thinking about what we could do, [...] we started searching what kind of projects there were, but there weren't a lot. [...] So for us, everything had to be invented.

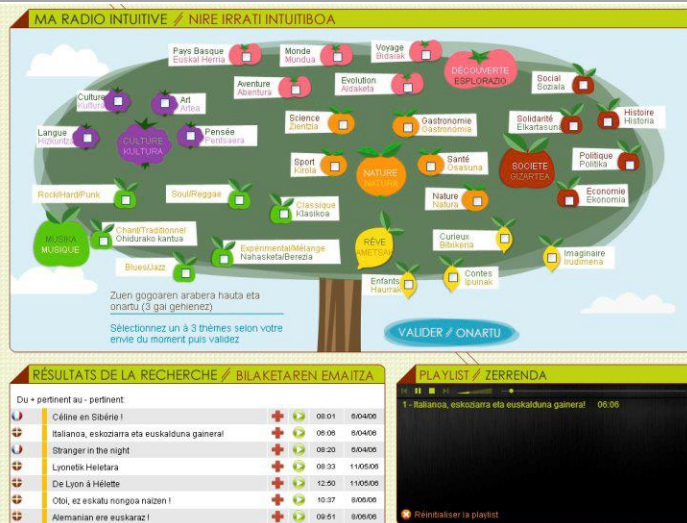
Its first step was one that can be emulated by any station just starting out: “we listed in a document what we wanted to appear on the website, and what importance to give to each thing.” But who is involved in the process of mapping the organization’s needs and planning each step? In the early days, it was often, in practice, one person who took on the idea and continued to carry the responsibility. Praising a founding member of Radio LoRa, Songül Çiftçi said, “Christoph Lindenmaier was a genius, and he made everything himself.” The result was often a DIY-process of learning by doing. Not all steps were successful, and stations had to experiment and learn from their mistakes:

We tried to relaunch three years ago, failed miserably, and then I went into my room for three days and nights and put out this WordPress blog so we had something to work with. Because what we had wasn't working at all. So then we said, OK we'll have that for three months while we look for someone to [relaunch the site] a little more professionally. And then those few months became nearly three years. So I think we used the WordPress blog as the main website for two and a half years. In the end I was happy we had it, but it is much, much better now. (Chris Wohlwill)

### Adventurous design choices

*Part of the process of experimentation and learning by doing were some adventurous design choices. Radio Kultura’s Mikel Etxebarria shared a screenshot of a previous homepage design, explaining:*

*“Before this website, we had one where we wanted to show people that [...] we had a lot of content which was recorded a long time ago – [because] it was very frustrating to know that we had ten thousand [items] but most people would never listen to the oldest ones. So we thought about how to give more importance to the archive, and we chose to make a kind of tree with a lot of fruits, and each ‘fruit’ would be a category...So for example, there were some lemons and some oranges...and the lemons would be the music content, so one lemon would be jazz, another one would be reggae ...The oranges would be all the socio-economic stuff – so one orange would be economics, another one politics...people [could] say, now I want to listen [to something] about travel, and you could see all the stuff that [we] have recorded that has something to do with travel.”*



*This site design was not well suited for sharing content on social media, however, he added, “and not so well made for the livestream, so that’s why we chose to change”. Another reason for the change to the site’s current design was to create something “that would work also on tablets, and smart phones, because today an important part of the listeners are on smart phones. [...] And, well, some people liked the concept of the tree a lot, but some other people [thought] it wasn’t very representative of a radio station, so that’s why we just said, for two years it was like that, and now we are going to [do something different]”.*

The launch of the Cultural Broadcasting Archive (CBA) was prepared in discussion with stakeholders, Ingo Leindecker recounts. But once the CBA site was online, however, these discussions were replaced with a more on-the-fly approach. From then “it developed mainly through feedback we got directly from users,” Ingo said, explaining that “we have to actually commission ourselves in a way”. That doesn’t mean they necessarily concede to requests a lot, however, Thomas Diesenreiter added:

Every couple of months someone asks us to implement a new field or a new feature, (which is a suggestion) to complicate the interface, not to simplify it...But we have to balance the different users...Often we say no because it’s just a need for a small percentage of people...In the last 3-4 years we have only added one field for everyone, which was the editors field.

Looking back on the CBA’s history, Thomas remarked that “many of the things, the paths we chose to go, like using only open source software, weren’t the most obvious things to do. But [...] I think there are many things where we probably are a kind of good

case, [...] or sometimes maybe even worst case as well; our experiences [...] of what to do and what not to do are now part of the cultural praxis.”

Today, stations like Radio Študent's and CUAC FM have IT/website professionals among their staff or volunteers. CUAC FM's 'Technological Committee' includes at least two software engineers who have been actively involved in the station's adoption of GNU/Linux systems and open source software and the development of the station's mobile app. They are still exceptions, however, and other stations are grappling with the limits of their DIY approach.

The staff of Radio Dreyeckland built the station's original website itself, but switched to bringing in external expertise for the most recent relaunch. “[With] our old system, Joomla, it was me and others, we worked with the system, we read books about it, and then we improvised,” Andreas Reimann said, but when the station switched to the Drupal content management system and a new design that is optimized for mobile use, they recruited an external developer. “I think it was necessary,” he added, “it wasn't possible to improvise.” Radio Wüste Welle came to the same realization and collaborated with an external company for its latest relaunch. “After two failed attempts, I learned the lesson that this is much too big a project for someone to do in their free time, and without any payment,” Chris Wohlwill said. “It gets more and more as you do it, and it's just not possible to do it in the evenings.”

Both Radio Wüste Welle and Radio Kultura, which hired an external developer from the start, chose a partner which fit with the station's profile, in Wüste Welle's case the local company My3so, which created its own open source content management system, Web x.0. “We paid them something for programming, for example, the connection to the documentational server, and the blogs, and how a profile should look like, and the other templates and so on,” Chris said, adding that it still only cost “a quarter of [what] a publicity agency would have wanted.”

## **Case study overview: Germany**

In Germany, many of the country's community radio organizations are organized in a national umbrella organisation, the Bundesverband Freier Radios (BFR). The BFR facilitates an online programme exchange platform, Freie-Radios.net, which provides member stations with a tool and an added incentive to upload their broadcasts and, where needed, integrate them on their own websites. Nevertheless, most stations in Germany are still at a rudimentary stage of sharing and archiving their content online, a

review we conducted of the BFR's member stations in the summer of 2014 revealed.<sup>4</sup> A clear majority of stations had at least some audio from past broadcasts available on their websites for streaming and/or downloading, but less than a third of the stations' websites included posts or items with audio content which are marked with some form of categorization or tagging to identify theme, format or author, and made it possible to filter or sort content by at least one of those things. Instead, more typical examples were the websites of Radio Unerhört in Marburg, which provided an [embedded playlist](#) with recent broadcasts the station uploaded to Freie-Radios.net; Freies Radio Wiesental, which featured [a "Download" page](#) with a long list of MP3 files with descriptions and size and date info, which can be played inline; and Radio StHörfunk, where [news items on the homepage](#) sometimes have embedded audio files.

More advanced examples included Radio Dreyeckland and Radio Z. Among the "Beiträge" (contributions) which are published on the Radio Dreyeckland site, almost [every item](#) includes audio content, which reliably appears as embedded and downloadable file at the top of the page, accompanied with information about length, upload and broadcast dates, categorizations concerning theme, region and person, and tags. The categorizations and tags can all be clicked to find similar content. Navigation menu items focused on themes (politics, culture, music) and geographic scope (local, regional, et cetera) open filtered lists of relevant "Beiträge". Selecting any of them also opens up further filtering options (by more specific subjects, region and/or series).

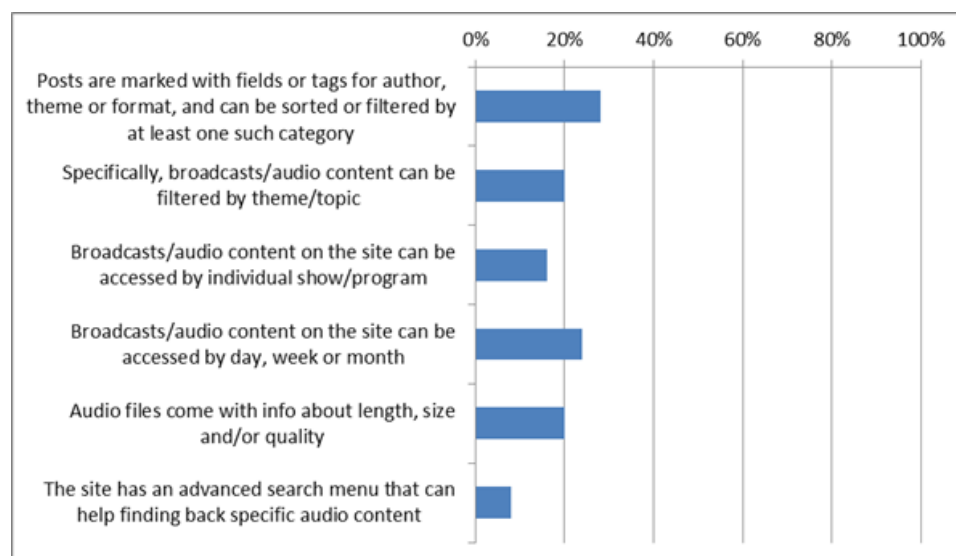
The website of Radio Z in Nurnberg has a sub-section called "[Radiobeiträge](#)" (radio contributions) where the listener can access overviews of individual broadcasts by general theme. Although the "Zum Radiobeitrag" button for every item features a headphone as icon, however, audio content is only sometimes included. In addition, individual programmes have their own pages or subdomains, and the default design of those features [similar listings](#). "Radiobeiträge" are categorized into eight general, mutually exclusive themes, but there are no further tags or categorizations to specify subjects or types of content, and there is no advanced search menu to look for content by subject, author, program and/or date. Eight of the BFR member stations featured RSS podcast feeds of recent broadcasts. But only four of them had taken the further step to accommodate listeners by offering one or more podcast feeds for specific programs or specific themes. Creating a podcast feed by itself does not allow listeners to find back individual past content by date, show or theme. Only a small minority of the BFR broadcasters have conducted some form of online archiving on their own site that makes that possible, while others rely on the Freie-Radios.net website to provide that

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<sup>4</sup> Joost van Beek, Community radio broadcasters in Germany and online archiving: Are we there yet?, October 2014, <http://livingarchives.eu/wp-content/uploads/2014/10/German-community-broadcasters-and-online-archiving-Are-we-there-yet.pdf>



service. Only one in five of them offered a way on their website to access (posts with) past audio content by theme or topic; one in six provided the possibility to do so by individual programme; and just under one in four allowed listeners to navigate to past audio content by day, week or month. On just five of these sites, audio files were accompanied with information about length, size and/or quality, and just two of them featured an advanced search menu to help find back specific audio content.



An exception was the archive of Onda, a Berlin-based online radio content service run by the News Pool Latin-America. Following up on the model developed by Freie-Radios.net, the Onda archive provides advanced search functions to filter results by country/region, format, series, language, dates, and authors. The full online archive experience, in which programs or snippets from programs are uploaded, natively hosted, and categorized, and can be accessed by theme, program and date as well as explored through advanced search options, largely remains elusive in Germany beyond the umbrella archive Freie-Radios.net itself, which this report describes in further detail in the section on national ‘umbrella’ archiving and programme exchange platforms. Since the stations which share a significant amount of programming on their own websites often only upload a selection of those programmes to the Freie-Radios site, this leaves a gap in the accessibility of their fuller range of content in a more systematized way.

## Descriptions and categorizations: level of detail

The online structures a station has developed may have come about primarily with the purpose of allowing listeners to look up information and perhaps listen back to

broadcasts of their favourite programme, or to simply listen to specific broadcasts they may have missed. But they may also be structured specifically to allow visitors to explore interesting content or find back historical material by theme or subject. This is reflected in how archived content is accessed and navigated on the site, which we will explore in the next chapter, but it also manifests itself in the level of detail that is provided about individual broadcasts, and the specific fields that are included. Considering that the main motivation for many stations to share and archive content online is to reach a broader audience for its programmes, whereas preserving a historical record of its productions for posterity is usually a secondary motive at best, it's not surprising that stations are unlikely to use full metadata standards like Dublin Core.

In many cases, each broadcast or item is accompanied by only a description and a minimal form of categorization, and if there is any information about the programme makers, subjects or language of the programme they are included in the description rather than as separate fields. Models where such characteristics are included as separate fields are more user-friendly, since they allow the listener to click through to filtered lists of further content from the same producer or on the same subject, or access such lists separately on the website (or through advanced search features). The same difference exists in how attributes of audio files, like duration, are included. Often they are automatically listed alongside the audio where it can be played inline or downloaded; only sometimes do they function as separate fields in the archive, allowing visitors to use advanced search or sorting features to select or identify only programmes of a certain length.

The national 'umbrella' archive sites like the CBA tend to include a fuller set of fields. This is due in part to their original core purpose of facilitating the exchange of programmes between radio stations, since the managers of participating broadcasters have to be able to review the parameters of a broadcast at a glance to see if it would fit in their station's programme. Even so, the fields on those sites are not comparable with the standards and detail of historical or museological archives. As Craol's Diarmuid McIntyre explained: "rather than thinking about what a historian or a member of the public needs to find in an archive in ten years' time, you think about what somebody [from] another station has to understand in order to make a decision as to whether to download it and rebroadcast it."

When individual broadcasts, productions, or individual items from broadcasts, are presented online, what information is provided about them?

At time of website review

Legend: X: Always | O: Sometimes

	Wendefokus	Nosotras en el Mundo	Red	Radio Student	Radio Kultura	Radio Corax: Lokal	Northern Visions: Collection	Near FM: Podcasts	Radio LoRa	Dorf TV	CBA	Freie-Radios
Description	X	X	X	X	X	X	X	X	X	O	X	X
.. of broadcast / item / production, specifically	X	X	X	X	O	X	X	X	O	O	O	X
.. of one sentence	O	O	O	O	O	O	O	O	O	O	O	O
.. of a few sentences / one paragraph	O	O	O	O	O	O	O	O	O	O	O	O
.. of more than one paragraph	O	O	O	O	O	O	X	O	O	O	O	O
.. only of the programme overall									O			
Photo / image			O	X	X	O	video	X		video	O	
Specific categorisations	X	X	X	X	X	X	X	X			X	X
.. by category / type of content	X	X	X	X	X	X	X	X				X
.. by subject / theme	O	O	X	X	X	X	X	X			X	X
.. by location / region / country	O	X	X	O								X
Tags (free choice)	O				X	X	X	O		O	X	
Author / Host / DJ		X	X	X	O	O		O	O	O	X	X
.. as text info in description			X	X	O	O		O		O	X	
.. as separate category												
.. included in tags					O			O		O	O	
Contributing station (in umbrella archives)												
Interviewee / person, group or organisation as subject				O	O	O	O		O	O		
.. as text info in description				O	O	O		O	O	O	O	
.. as separate category				O								
.. included in tags					O		O	O		O	O	
Broadcast date				X					X		O	
Upload date	X	X	X		X	X		X		X	X	X
Audio file duration					X			X	X	X	X	X
.. as category (clickable)									X	X	X	
.. as text info					X			X				X
Language					X						X	X
Audio file format		X	X	X							X	X
Links to more info / social media / external site		O	O	O	O	O		O	O	O	O	X

The table on the previous page presents an overview for eleven selected websites of what kind of info is provided about each individual broadcast or production, in which form and fields. One thing these sites have in common is that individual items about broadcasts or productions almost always feature an audio recording that can be downloaded or played inline, though the form in which it is included can vary; on the Red Nosotras en el Mundo site, for example, several audio files can be presented in one post, and are not categorized or searchable separately.

Descriptions are the most basic ‘building block’, but as the table indicates can vary greatly in length and type within a broadcaster’s archive, especially in those cases where volunteers upload their own content. There is only so much they can realistically be expected to do, Radio Z’s Michael Liebler argued: “I don’t want to tell people, you have to write very much. [If it’s] one sentence, okay - one sentence.”

At Radio Kultura, the format of the website’s archive structure, in which individual items ‘unfold’ within the page rather than opening as separate webpages, imposes its own limits. “Descriptions cannot be more than, say, twelve sentences,” Mikel Etxebarria told us, “and the title is very important – [programme makers] ask each other’s advice, and give feedback about each other’s [ideas].” Regular music programmes, however, “usually have the same name every time, and only the number changes.”

The ‘Lokal’ site of Radio Corax, which primarily showcases the station’s news and current affairs programmes, is also characterized by concise but informative descriptions, which serve as short news items in their own right. Ranging from one to several paragraphs, they conscientiously cover the broadcast’s subject, context, the name and role of any interviewee, and external links where appropriate. When the subject concerns an event, its time, date and location are also given. In the case of regional news programmes, however, there are usually no such descriptions but instead bullet point-style lists of subjects.

The screenshot shows a list of broadcast items on the Radio Kultura website. The items are displayed in a grid-like format with a yellow background. Each item includes a title, a brief description, and a photo of the host. The items are:

- Item 1:** Title: "Stop Kateratzeak... bankuak nahi badu." Description: "ERREPORTAJA / REPORTAGES EUSKARA IRAUPENA / DUREE: 07:53 DATA / DATE: 17/06/14".
- Item 2:** Title: "Eskuin muturra Hungarian : irrati libreen bukaera ?" Description: "ERREPORTAJA / REPORTAGES EUSKARA IRAUPENA / DUREE: 07:45 DATA / DATE: 3/06/14".
- Item 3:** Title: "Extrême droite en Hongrie : la fin des radios libres ?" Description: "ERREPORTAJA / REPORTAGES EUSKARA IRAUPENA / DUREE: 31:29 DATA / DATE: 3/06/14". The description text is in French and discusses the political context of radio freedom in Hungary. It includes a photo of a man wearing a "TILOS CREW" t-shirt.
- Item 4:** Title: "Protéger la mère c'est protéger l'enfant." Description: "ERREPORTAJA / REPORTAGES FRANÇAIS IRAUPENA / DUREE: 09:31 DATA / DATE: 20/05/14".
- Item 5:** Title: "Zirmino baten burutazioak..." Description: "MINTZALDIA / CONFERENCE EUSKARA IRAUPENA / DUREE: DATA / DATE: 20/05/14".

In general, community broadcasting organizations have to be flexible. Even at the Cultural Broadcasting Archive (CBA), Ingo Leindecker said, “we don’t have any real guidelines” about how to write the descriptions. On Radio Orange’s website, where every programme and every past broadcast is presented individually (though often without the possibility to listen to it), pages about programmes as a whole generally feature a substantive description of a paragraph or two, with details about the language a programme is in, the programme maker or host, and occasionally its geographic focus and/or an external link or two. But information about individual broadcasts is spotty. A check of fifteen random recent past broadcasts revealed that only nine included some information specific to the broadcast, though three of those extended to several paragraphs and one even included a literature list.

The eleven websites listed in the table almost all organize content by either applying at one least categorization field or tags. In the CBA, for example, items are categorized by general theme or genre (e.g. politics, society, entertainment, culture) and sometimes thematic subcategory (e.g. health, education, music, film), but additionally marked with a free choice of tags. The Northern Visions archive and Near FM podcasts site similarly apply a combination of basic categories (e.g. arts, music) and a free choice of tags. Red Nosotras en el Mundo is one of the broadcasters which uses complementing categorizations of content to distinguish between different formats (news item, interview, live broadcast, theatre) and different subjects (science, activism, human rights), and adds a field to identify the relevant country. Notably, only few of the archiving structures we reviewed which utilized tags also provided an overall tag listing or tag cloud to explore; only where a certain tag is added to a broadcast, can visitors click it to find related content.

The Radio Študent archive experiments with distinguishing between types of tags. When individual broadcasts are tagged, those tags are sometimes divided to specify ones that relate to

AVTORJI:

MARKO BRECELJ BOŠTJAN BUGARIČ GABRIEL GARCÍA MÁRQUEZ

INSTITUCIJE:

MAO UPB MKŽN ARCHITEKTUUL

KRAJ DOGAJANJA:

ILIRSKA BISTRICA LJUBLJANA CIUDAD DE MEXICO



political topics; relevant venues or locations; groups or organizations covered or represented in the broadcast; and people as subjects of the broadcast. It’s a useful experiment when reviewing the use of tags in other archives, which at times is confusing and inconsistent. When an item is classified by both tags and other categorizations, it is not always clear for users which form of categorization serves which purpose – and, it seems, not for uploaders either. From site to site, and

sometimes within a single site's archive, one can find the names of programme makers or hosts, for example, included as separate field, as tag, or as part of the description field – and that choice helps determine whether a user can access or filter content by an individual host or DJ. Similarly, within a station's archive, names of interviewees or relevant people might be included as tag or as part of the overall description, depending on the person uploading the content. Where tagging is the dominant form of categorizing content, it depends largely on the individual uploaders whether they will use the feature to indicate who the programme maker was, whom the broadcast was about, what location or geographic focus was involved, what subjects were broached, or any combination of the above.

On the Wendefokus.de site, for example, at the time of our website review, the use of tags was sparse and inconsistent. A sampling of the most recent fifteen analysis/background pieces and personal stories revealed that seven had no tags at all, the others had a maximum of three tags, and tags ranged from the very general to the very specific. In the CBA, some of the tags were very specific as well – maybe overly specific, considering it is probably unlikely that tags like glutathione, Anti Atom Komitee or kritische Ökonomie are ever going to be used more than once, and therefore fulfil little use. These examples illustrate how the act of tagging content, itself, is a skill that requires some coaching or training to be done effectively.

## **Audio content: What gets to be uploaded?**

Some community broadcasters upload all their broadcast output online. At Radio LoRa, for example, all broadcasts are published online after broadcasting. At least once a day, the latest content is published and broadcasts become available on the daily programme page as well as on the pages of the individual shows. The use of automatic recording and uploading software stimulates this approach. Nevertheless, most of the broadcasters we reviewed and interviewed only shared selected programming on their websites.

Which broadcasts and items are archived and shared online mostly depends on four variables: copyright issues, the interest of volunteer programme makers, a pattern in which only selected programmes are always uploaded, and some selection on the basis of quality or relevance.

Copyright concerns were a major consideration in deciding which content is shared online for practically all stations we spoke with. Music programmes and to some extent other programmes that feature some music content are excluded. The stations from Austria, which benefit from a new contractual agreement between the community media

sector and the country's two collecting societies, were the exception to the rule. The agreement frees community broadcasters from the need to laboriously edit out music content from general interest programmes or to avoid uploading music programmes altogether, as the stations had done previously.

The second major factor in deciding which content is shared online is the interest of the volunteer programme makers. It depends on what people want to upload, Radio Z's Michael Liebler said, and Radio Wüste Welle generally speaking has a similar laissez-fair approach. At the time of our interview, about 70% of the content on the Wüste Welle website was from its local news and current affairs programme, the 'Lokalmagazin', but Chris Wohlwill was hopeful that content would soon become more varied, now that the station's new website was up and workshops on how to use it were running. As far as the station is concerned, he said, if programme makers "think it's important enough to put it on the web, it's fine with us. As long as the title is not too long, it has a picture, and there is text that you can understand, we present it on the website."

Near FM's Paul Loughran articulated this approach in a little more detail:

We **give people the choice** – if you want to archive, if you want to podcast your programme, you can. And obviously you **can't podcast commercially licensed** music, you can't podcast **anything that's defamatory or libellous**, or would incite to hatred, we don't give a carte blanche; it's not, go and do whatever you want, there are still some rules about what you can podcast – but generally it's like, if you feel that your programme is worthy of podcasting, you can either do it yourself, with the skills that we give you, or you can ask a member of staff.

At many stations, however, the practice is more mixed than it might seem. Some programmes are always or usually uploaded; for others it depends on the individual programme maker's interest. Some people at the station have to upload and archive their productions; for others it is voluntary. "We have some people who are paid – not paid very much, but paid – [who work for] the daily, political-cultural programme, Stoffwechsel," Michael Liebler also explained, "and they are told to do it. And usually you see some teams doing it very well, and other ones don't want to, or don't have the time". Radio Stadtfiler always uploads one of its programmes, which is broadcast every day, "because it is made by interns," Anna Tavernini explained; with the other programmes, it depends on the volunteers involved and if they would like to podcast their show.

Most of the content that is uploaded to the Radio Dreyeckland website, Andreas Reimann said, is from its morning show, which is focused on news and political and current affairs. The editors of that programme "get some small [amount of] money, and

for that they have to work on the morning show, join one weekly meeting, and upload their things. It's not enough to go to the morning show, play music, do interviews; they also have to upload it. It's part of the job, yes. [...]. I think that, without this money, it wouldn't work."

Uploads selected content	Reasons mentioned in interview/discussion ...			
	A: Copyright/Music content B: Only selected programmes always uploaded C: (Additional) programmes only uploaded if volunteers want it D: Selection on quality / relevance			
	A	B	C	D
Kanal K	√	√		√
Near FM	√	√	√	
Radio Corax	√		√	√
Radio Dreyeckland	√	√	√	
Radio Orange			√	
Radio Stadtfiler	√	√	√	
Radio Wüste Welle	√	√	√	
Radio Z	√	√	√	√

Other concerns also come into play in decisions about which content is archived online. Some are practical: programmes which are made as part of a special series or funded projects might be singled out for uploading. Others are more general. The CBA's Ingo Leindecker observed that for many years, spoken word programmes tended to be prioritized by participating stations, and not only because of copyright considerations, which nobody was really thinking about yet ten years ago. "It was more the consensus that we wanted mostly spoken word," he said, "but it's changing."

Quality, relevance, and in some cases issues of privacy play a role as well. Volunteer programme makers might indicate that they would rather not see the broadcast they just aired, or the interview they conducted, published online because they feel it was not up to scratch. At Radio Corax, volunteer programme makers are free to upload any of their broadcasts to the Freie-Radios.net archive, but when it comes to the daily news and current affairs programme, Michael Nicolai said, an editorial decision is sometimes made about whether to publish an individual interview or segment online: "sometimes I decide that, no, that is not good to show again; it's good that it was transmitted and in the past."

This remark also ties into a broader argument that was mooted at the Captcha project's closing conference, "Radio Archives in European Community Media", in the context of



disadvantages to automatized archiving and uploading software. On-air content “versendet sich” (‘is broadcast away’), one of the participants argued, while the visibility of enduring online content is potentially larger - not just for better but also for worse. There may be times when a station or programme maker may be uncomfortable sharing broadcasts online, not just because of potential quality issues, but also when privacy concerns would be raised. In an echo of the discussions about “the right to be forgotten”, he pointed out that interviewees on sensitive subjects might regard their accounts being aired once quite differently from them being searchable online for an indefinite time.

### **Stream versus archived content**

When a community radio station only broadcasts online, one might expect the equation to be more straightforward: what is broadcast online, is archived online. This is not the case with the two web-only initiatives we reviewed however, Red Nosotras en El Mundo and Radio Kultura. Both websites feature a livestream as well as an archive with audio content; in the case of Red Nosotras, the Sound Library; in the case of Radio Kultura, the ‘Émissions’ archive. But in both cases, the two are not reflective of each other.

At Radio Kultura, the productions that are published in the ‘Émissions’ section of the website are uploaded before they are ever broadcast in the livestream, and some of that content is in fact never broadcast on the stream. The formats for both types of content are different too. The interviews in the archive, for example, are edited in such a way that the listener only hears the voice of the interviewee, not the interviewer, and the explanatory text is provided in the web description. When the same content is broadcast in the stream, some moderation is added.

Vice versa, not everything that is streamed live is featured in the ‘Émissions’ archive. This goes back to the station’s historical development. In its early days, the livestream consisted entirely of music, while the programme makers focused on creating original content that would be uploaded to the archive once a month. The livestream still consists mostly of musical content: partly volunteer-created programmes, and partly auto-generated, “shuffled” playlists of pre-selected songs. Productions from the archive are mixed in, Mikel Etxebarria explained: “we have so many items in the archive, we can use them frequently to broadcast in the live stream.”

On the site of Red Nosotras en el Mundo, the live stream and the Sound Library similarly seem like separate endeavours. The stream mostly airs live programmes, many of which are relayed from the live streams of various Latin-American community broadcasters. The Red Nosotras team approaches community stations to ask about re-broadcasting specific programmes of theirs, and if they are interested, pipes the

livestream of their sites through the Red Nosotras site as well at the hours the given programme is broadcast. It then schedules other content around those live streams, using ZaraRadio scheduling software and applying different broadcasting schedules for three different time zones, including music, jingles as well as content from the site's Sound Library.

Most of the audio content in the Sound Library is produced or recorded specifically for the site by its managing organizations and a range of partnered community organisations, but not everything in the Sound Library is ever broadcast on the stream. A significant share of the Sound Library's content consists of recordings of conferences, debates and interviews, some of which have been uploaded by organizations and individuals rather than radio stations, and some of it is of great archival value but less appropriate for broadcasting.

### **Whole shows or part of shows?**

Just like many community broadcasters decide to only upload some of their programming to their websites or online archives, some turned out to upload parts of programmes, instead of whole broadcasts. There were three main contexts to this practice. The first one is familiar: copyright concerns. "The decision of what part of a show or programme is to be republished or cross-media published is really easy," Michael Nicolai from Radio Corax said. "It's everything besides the music. So it's really the self-produced content." Manually editing out music content from a mixed-content broadcast is onerous, so instead stations might rely on uploading only segments from their news and current shows. At Radio Wüste Welle, Chris Wohlwill said, "it's moderation, presentation, and interviews, features."

A second, related context involves the role of pre-production processes. Some content for radio programmes, and especially daily news and current affairs shows, is prepared beforehand and then mixed into the live programme. "We developed a software, something like a CMS for radio stations," Radio Z's Michael Liebler explained, and the production process "starts with planning the programme, [...] and after that they record some interviews and upload them into the software, then they write their moderation, and if it's all ready and the programme starts, they can use this tool." In those cases it is frequently only the pre-recorded parts of the broadcast that are made available online afterwards.

Copyright is not the only reason for this, and often not even the primary reason. Part of it is simply convenience, as Michael added: "When the interview is a live interview you have to edit it for the archive, and that's a little bit of work, and some people don't do it." But mostly, there is a real awareness that online content in shorter chunks is more likely

to rouse and keep the interest of listeners, and be shared or rebroadcast. “The last few years, the development went more in this [direction of] pre-produced contributions,” Ingo Leindecker observed about the content of the Cultural Broadcasting Archive; fewer “whole radio shows, and more and more smaller pieces, like an interview about a specific topic”. He credited in part a specific German tradition of doing so, but also a broader shift: “I think especially people who are into [...] social networks, they have this awareness that such kind of content is much easier to spread”. This sensitivity seemed reflected in our interviews. When it comes to Radio Corax’s daily news and current affairs programme, Michael Nicolai explained, “we don’t publish whole shows, just the single pieces, with new introduction texts to make it more interesting for the podcast listeners.” Especially in the context of such programmes, which might present several longer reports about thematically very different subjects, uploading them separately also helps online visitors find back content which specifically speaks to their interests. A shorter item about “one topic, with metadata and a description will be more interesting one or two years later, if it’s an important topic, than a complete programme [which covers] different topics,” Michael Liebler said.

Length is also a consideration when it comes to anticipating whether other community radio stations will rebroadcast an item, Michael Nicolai explained:

It can be seen on [freie-radios.net](http://freie-radios.net) that our really long pieces, if there’s 30 minutes of interview, are often not used at other stations, because they don’t have programme slots where this could be fitted in. [...] Sometimes I really think about that, whether [for example] Radio Blau could use a 10 minute piece for their one-hour daily news programme, and not the [full] 25 minutes. Because I know that they don’t have resources to go into this thing and edit it so it fits in their programme – so I’m reflecting on that level as well.

Radio Orange and Onda solve this dilemma by covering their bases, uploading both the whole broadcasts and individual items from their news/current affairs programme. The broader trend of uploading shorter segments instead of entire broadcasts, however, may not wholly be a matter of such calculated choices, the CBA’s Thomas Diesenreiter argued, but rather, at least in part, an organic reflection of the new media environment:

I think it’s also maybe a sign of the general change in the usage of the internet. Because content as a whole is getting more compact. With this huge amount of information overflow every day, I think people start to mirror their own [web] usage habits, and try to [also] do smaller parts which are more easy to consume.

## Legacy content

It is relatively rare for stations to go back and digitize older material to share online, or upload already-digital content from before they established their online archive. “[It] never even occurred to me, to do previous” content, one interviewee admitted. “If we had funding, from an archive body for example, we would go back,” Near FM’s Paul Loughran said, but for the time being “there just [isn’t] enough time or resources for someone to go back in time.” It happens only on an experimental scale, as mentioned earlier in this report under “Digging things up from the archive”. But the desire certainly exists. “Radio Dreyeckland is very old, more than 30 years old, and we have a lot of old tapes,” Andreas Reimann told us, “so we’ve started to digitalize, [and] we also want to upload broadcasts which are older than twenty years. We’re discussing having a special field on the homepage, ‘20 years ago’ or something like that.”

In an interesting strategy to get around to the task of digitizing and archiving older content, the radio station partly relies on former volunteers. They come into the office to digitize the programmes they and their colleagues had made themselves. “We have three to five people who do that, more or less intensely,” Andreas said. It does mean, however, that clear rules have to be set “so they all do it in the same way”. Thomas Diesenreiter observed a similar phenomenon at the CBA: when historical content is uploaded to the archive, it is not so much by stations as by individual users, usually (former) programme makers “who have recordings of all their broadcasts from the last ten years, and then one day decide to [upload] them”.

Overall, though, the priority is very much on sharing current content, and time and resources for that are already scarce enough. This is understandable, but leaves much existing, valuable community media content inaccessible or underutilized.

## CHAPTER 5

### Structure and design of archived content online

Some archives of past broadcast info, whether organized by day or by programme, serve a general aim of allowing listeners to catch up with broadcasts they missed, or just listened to. Those may only sometimes include actual audio files, attached as one among several content elements about the broadcasts, alongside descriptions, playlists, info about guests, links to external sites, or photos. Other archives are based more squarely around the audio content.

In both cases, archived past broadcasts are not usually labelled as an archive. Radio LoRa's and Radio Kultura's archives are just called "Broadcasts", which makes sense since the intent with which their main target groups are visiting the website is not to nose around in an "archive" but simply to find (back) programmes and broadcasts. It's a branding question, in part; one of framing things from the perspective of the audience. On the Radio Študent site, the word "archive" is only used in reference to the station's defunct but preserved former website with content from 2012 and before.

#### Archived content as separate space within websites

Traditionally, archived information and audio of past broadcasts constitute a separate part of the website, more or less prominently featured on the homepage and in navigation menus.

At Radio LoRa, for example, the archive is a main item in the navigation menu, but otherwise not featured on the home page. On the website of Red Nosotras en el Mundo, the front page prominently highlights the Sound Library, and the Sound Library is one of the main navigation menu elements. Depending on how easy the archive is to access and how it is structured itself, the process of getting to an individual past broadcast and playing it can be shorter or longer.

How many clicks does it take? (From the homepage)					
	Radio Kultura	Radio LoRa	Near Podcasts	Radio Študent	Tilos Rádió
To listen to one of the most recent broadcasts	1		1	2	2
To listen to a recent broadcast from a specific show		4	2	3	3
To listen to an older broadcast	>1		>2	>3	>3

On sites like these, archived content is highlighted elsewhere on the website in various forms. The Radio LoRa site, for example, includes news items and a special section on women-related content. The homepage features a “Broadcast of the Month” section, and the “Projects & Specials” section lists a number of historical projects and broadcasts, with many of those pages linking through to archived broadcasts. The Craol site’s home page and programme exchange page feature a “Click here for: Best of community radio” button, which launches a pop-up “Craol player” playing a limited set of recorded programmes.

Many websites publish news items on the front page which highlight newly published content, or lists of recent additions. The Tilos Rádió site’s home page, for example, highlights recent and upcoming broadcasts which have descriptions in sections called “Legfrissebb adásnaplók” (‘latest broadcast posts’) and “Műsorajánló” (‘programme recommendations’).

### **Trend: the content *is* the website**

On sites like those of Radio Študent, Radio Kultura, Radio Corax’s ‘Lokal’ site or the Northern Visions archive site, the homepage itself consists wholly or mostly of the most recent archived programmes. Other content like news items and info pages, if available at all, are the ones relegated to separate spaces. Separate, static web pages and sections are replaced with dynamic pages showing content filtered by tags or other categorizations.

The Radio Študent website, for example, consists almost entirely of an archive of information about individual past broadcasts (though that info is only sometimes accompanied by audio). There is little further content: there are no news items, and info about individual projects or activities is mostly relegated to separate (sub)sites. The main sections in the site’s overall navigation menu (politics, music, culture, society) do

not present separate, static pages with information, but merely filtered results from the archive.

On the Radio Kultura site, the homepage also largely duplicates the content of the site's de facto archive. Underneath a slide show feature where a selection of recent broadcasts is highlighted, the homepage presents the latest uploaded items as visually-styled tiles. There is minimal content on the website beyond the archived audio items with their descriptions. There are no news items, no info pages about for example the European projects the station took part in, and there is no About Us page, no 'swag' page to sell station-related products, no page showcasing media coverage of the station.

In this model, the audio(visual) content itself is sometimes placed in the centre of the design. On the Northern Visions general collection site, for example, embedded content is not, as on many blog-type community radio sites, placed at the bottom of descriptions of varying length. Each video does have a description of variable, but often substantive length, but it is positioned modestly underneath the embedded player.

If this is a broader trend among community media, it is in line with changing web usage patterns. Multimedia content takes more priority over text, and front page design moves away from an overload of different types of content, presented in parallel frames and structures which are often designed along the model of a newspaper front page. By discharging the legacy of early web development and its default frameworks, such a trend arguably helps radio stations especially, by bringing the spotlight back to the core content of radio-making - the actual programmes.

Some loss of context is involved, however. The Radio Kultura site's concise structure helps avoid structural clutter, improving the accessibility of its content which is not spread between news items and broadcast descriptions, or between pages for shows, hosts and individual broadcasts. But it makes it harder for new visitors to find out more about the station's identity, activities and programmers. Relying on tags and categories to replace static pages about individual programmes and hosts with dynamically filtered feeds sometimes has the effect of removing general descriptions about the programme or DJ in question altogether. There also seems to be some loss of adaptability for different kinds of content, in which some types of content are effectively pushed off the site onto separate (sub)sites. It might, for example, not be coincidental that the Radio Študent website is accompanied by a diaspora of separate websites and subsites about, among other things, the station's [record label](#), [its marketing](#), the [festivals](#) it [organizes](#) and various Radio Študent-[related initiatives](#).

## Parallel structures: pitfall or opportunity?

An opposite set of issues emerges when community media sites feature audio content, but it is to some extent scattered across different sections of the site.

The Tilos Rádió website, for example, encompasses a general archive of past content, accessible by date and by programme, but also includes several other sections with historical audiovisual content. An extensive audio library (“Hangtar”) presents long lists of audio files, mostly of past Tilos DJ mixes and concerts. A “Legendarium” page highlights six historical radio shows from the 1990s and links through to MP3 files of individual broadcasts for each show. The Writings (“Írások”) subsection in the Chronicle section of the site, which presents interviews with music artists from the past ten years, features transcripts and at the time of the website review still included links to audio or video files as well, though many no longer worked since they had been hosted on MySpace.

The problem that such parallel structures might create is if a lack of intuitive distinctions and clear signposting leaves users who are looking for past audio content unable to recognize how much content is available, and what can be found where. This is an issue at Near FM. The universe of Near Media Co-op websites includes a separate Near Podcasts site, but at the same time many news and info items in the “Programmes” section of the Near FM website include embedded audio files that were uploaded to the commercial services Soundcloud and Mixcloud. Not all of those are also included on the Near Podcasts site, and there is no clear indication of which broadcasts might be found on which site. Even on the Podcasts site some content is uploaded there directly, while some content is uploaded to Soundcloud or Mixcloud and then embedded in the Podcasts site, though not all of the station’s Soundcloud and Mixcloud content is embedded on the Podcasts site.

“In terms of what goes up on the website, that’s usually a decision made by staff,” Paul Loughran explained. “If we’re promoting something, [...] we put that up on the website, and embed the soundcloud.” But, he added, “I’m even confused about why we have podcast and Soundcloud and why we don’t just push one instead of the other. [...] You’ll have one of the programmes on podcast and the other four on Soundcloud, and you’re like, what? We need to get them all on the same place because it doesn’t make any sense otherwise”.

In Germany, a new institutional arrangement with the collecting society GEMA allows community broadcasters to upload all content, including music content, but only for a limited length of time. As helpful as this is, it could risk splitting the archiving effort by



stations into parallel structures, with (potentially automatized) archives of all content of the last week existing side-by-side with an indefinite archive of selected content that is more fully described and categorized. When it can already be challenging to persuade volunteer programme makers to engage in structured archiving, any resulting diversion of archiving processes into parallel structures might even serve as a brake on the development of more structured, searchable archives. Radio Dreyeckland's Andreas Reimann was, at the time, somewhat concerned: "it's totally new and it's difficult to develop, and to build it into our website." Radio Wüste Welle's Chris Wohlwill was more sanguine, however:

We'll have to set up the seven-day thing once, and then it will do its thing automatically. The other part is **on-demand content**, where you can listen to certain features or certain interviews afterwards. [When it comes to that content,] you **don't just cut out the music**, you write a small article about it, and you put up a photo, think of a title [..]. Because if you actually put in the work to edit the file appropriately, you also want someone to hear it, so you **have to do some online editorial work**, otherwise [...] **who's going to listen to that?**

A few key questions should help radio stations become aware of the pitfalls involved, and avoid confusing listeners and complicating working processes. If content is uploaded and embedded in different sections of the site, are there clear criteria in place for what goes where? What competing priorities and personal preferences are pulling that choice in different directions? Is the practice determined by what is easiest for the station, or what would make the most sense for the online audience? Is there adequate signposting to make content easy to find even when presented in parallel locations? If the same content is available in different places, are they in sync? Are they interlinked to the possible extent?

## Archiving by day and by programme

The question of interlinking parallel content is also relevant for the many stations which provide access to archived broadcast content both by show and by day. Do the listings of broadcasts by day link through to the pages by programme or, preferably, individual broadcast? Are separate descriptions and other metadata provided for each broadcast, or is the audio of all past broadcasts simply attached to pages by programme?

On the Tilos Rádió website, the "Műsorok" ("Programmes") section presents a list of all Tilos Rádió shows with short descriptions, divided between talk shows and music shows. Every programme has its own page, with a (usually very short) description; information about its broadcast times; links to the pages of individual hosts/DJs; and an

RSS feed, as well as, sometimes, links to the Facebook page of the show or an external link. Recent broadcasts are listed underneath, and can be streamed from this page. It is possible to click on any of the recent broadcasts for more information, but there usually is none. There are only occasional exceptions where a playlist or more information is given.

Parallel to this structure, the section of the website that's labelled "Archív" provides access to programming by date, with a calendar icon and "previous day" and "next day" links facilitating navigation. Clicking on the link for any programme listed for the day leads the visitor to the general page for that show, not the page for the individual broadcast. However, the broadcast can be streamed already from within the "Archív" page.

This basic model is reflected on many other sites as well. Overviews of a station's programmes, whether divided by editorial field or presented together in long lists, lead to descriptions by programme and, sometimes, individual broadcast, and audio is provided, where available, on those pages. Where individual broadcasts are described, categorized and tagged, this creates something more closely resembling an archive, but if listings by programme are not smartly designed this means that visitors need to click through more pages to find audio content – or, in many cases, to find out whether there is any audio content for the broadcast in the first place.

On the website of Radio Wüste Welle, for example, at the time of our website review, every programme had its own page on the site, and the pages of some programmes featured a subsection with "contributions and articles," for example reflecting the content of an individual broadcast. Audio content, where available, was then attached to any such contribution or article. Not every broadcast, however, resulted in a contribution or article – many programme pages only featured a general description and broadcast times. Moreover, only some contributions and articles featured audio.

At the same time, visitors could also browse the station's programming by date. Since only few broadcasts were individually described as contribution or article, clicking the name of any show took the visitor to the overall page of that programme. Like at the Tilos Rádió site, therefore, content could be navigated by date, but was actually archived by programme.

The Radio Orange website is structured in the same way, and involves similarly laborious navigation paths. Information about past broadcasts can be accessed both by day and by programme, but is archived by programme. When using the calendar tool to browse the programme schedule by day, clicking on any programme title sometimes

leads the visitor to the general information page about the programme, but if information is available about the individual broadcast in particular, the link points directly there instead, which is helpful. On the other hand, accessing information about individual broadcasts by programme can require some determination. The [Sendereihen page](#) presents a lengthy alphabetical listing of all currently broadcast shows, while linking through to a list of discontinued shows. To get to information about an individual past broadcast, the user chooses a programme from this list to get to its overall description, where he can choose to click on a link for one of the most recent five broadcasts or on the “All broadcasts” link, where he clicks on a plus-sign on the resulting list of past and upcoming broadcasts to see more than five of each, and click on any one of them to see if there is any more detailed description or a link to audio.

The question about the user-friendliness of archives by programme is raised also at the Radio LoRa website. There, too, content can be browsed by date or by programme. The programme schedule by day reduces the need to click through different pages by not just presenting the title of programmes, but also the descriptions of the individual broadcasts within the page, and making it possible to open the audio for the broadcast straight away as well. Navigating the “Sendungen” (“Broadcasts”) section of the site, however, is more taxing. In contrast with sites of other stations which put recent or selected archived content at the centre of the page lay-out from the beginning, the homepage of that section presents explanatory information about the station’s programmes and what kind of information is included in this section of the website, and a choice of links to different ways of browsing programmes: “all current programmes,” “all programmes,” or “search for a programme” (which links to a free-text search field). This structure is less than user-friendly because the options to browse all programmes or all current programmes yield very long lists of alphabetically listed show titles, with no further information: 178 current programmes and 3,120 programmes in the full listing. The lists also seem to include some overlaps and duplications; there are, for example, separate entries for “Groovetown” and “Groovetown:” with overlapping but not identical content. Without any indication of what the sometimes ambiguously named programmes are about, or any categorization of programmes, these immense lists are useful for people who are looking specifically for information about a programme they already know and like, but less so for online visitors eager to explore the station’s online content.

## Archiving chronologically

Not being tied to specific shows or broadcast schedules, the Sound Library of Red Nosotras en el Mundo is organized more simply, in the form of a blog. This is also a default structure of sorts for many smaller community broadcasters or online archives of

individual programmes. Audio files are attached to individual blog posts, which are presented chronologically, the latest first.

Like blogs, the Sound Library homepage presents the beginning of the text for each item, and the categorizations for each post (date, author, country, topic and format) can be seen directly as well. Icons indicate how many audio files are attached to the post, but no audio can be played directly from the Sound Library homepage. While there is no overall list of themes to use for exploring content, the field can be used to browse from one item about, for example, “sexist stereotypes”, “cooperatives”, “communication media”, “hate crimes” or “human trafficking” to related posts. The search page, which allows the visitor to search content by theme, country, format and/or author helps the Sound Library function more like an archive.

The Sound Library navigation menu includes three further options to select specific content:

- The ‘Coberturas y transmisiones’ page lists some of the posts in the Library about broadcasts from events, meetings and conferences – specifically those whose format was categorized as ‘Radio EN VIVO’;
- The ‘Servicio Informativo RNR’ page lists episodes of a weekly news programme that was produced until December 2013;
- The ‘Recomendados’ page presents “a list of recommended audio” in the form of a playlist, without accompanying information.

## Archiving by theme and category

The more information and audio of programmes and individual broadcasts is categorized by format, theme or free-form tag, the more stations are able to present parallel navigation structures to browse their online content by topic rather than day or show.

When Radio Dreyeckland still used the Joomla content management system, Andreas Reimann recounted, “the problem was [that] it was a very linear structure.” It was easy to search for broadcasts by programme because the website structure was based on the programme schedule, “but when I looked for some topic, it was difficult to find.” With its current Drupal system, he said, “we’ve structured it in both ways. By broadcasts, programmes, and also by subjects, like politics, culture, or on a more detailed [level], for example movies, refugees/migration, economics.”

The homepage of the Dorf TV video portal shows a paginated overview of the most

recently uploaded videos; content can be sorted to show the oldest instead of the newest content first, by creation instead of upload date, by most views, and by length. Instead of featuring separate webpages for individual programmes, video portal content can be filtered by tags (music, art, culture, hip hop, literature) as well as “channels” which represent individual programmes or content creators.

When choosing to view content with either a certain tag or from a certain channel, the other selection adjusts automatically: i.e. when looking at a certain channel, the tag list turns into a list of “channel tags” which only includes the ones used within that channel, and vice versa. The user can layer on multiple tags, and layer (multiple) tags on top of a selection of one specific channel, to get to as narrow a final selection as you wish. As with a similar feature on the Radio Kultura site, it remains an open question how intuitive this system is for many users, but they can always return to the video portal page to browse its complete collection by tag again. This was a problem at the Radio Wüste Welle site, illustrating the risk of design choices leading to unintended consequences. Website visitors could access overviews of articles about past broadcasts by editorial team – the local affairs program, the women’s program – and all articles were categorized, with options ranging from “regional”, “youth” and “culture” to “events” and “live broadcasts”. But access to content by category only functioned within the content of a specific editorial team. If a user was browsing the content of the local editorial team, for example, and a contribution was tagged with “politics”, clicking it would get the visitor all items about politics from the local editorial team, but not those from the women’s issues team. There was no way to access all the station’s items by subject.

## **Designing archive content and structure to reflect its purpose and target audience**

Archiving by date, programme or theme: the choice of what content to present, and how, in a station’s online archive is most likely to work well when it is made upon deliberation on a set of questions. Who do you aim to reach? And what are their needs? What are they likely to be looking for foremost?

Many people who work on community media online archives are engaged primarily with managing and adding day-to-day content and keeping the site running. Online content in general, when unchecked, tends to expand organically, and this is probably even more so for largely volunteer-based organizations than for business entities. The result is that community broadcasters, when they do engage in archiving their content online in a comprehensive way, develop archives that tend to mushroom into complex, opaque navigational structures and content trees, where different kinds of audio and non-audio

content is spread over many different sections. “Our website is great, on the one hand, and a disaster on the other hand,” Radio Orange’s Jan Hestmann said:

It's **very complex**. It grew for the last ten years, and it grew bigger and bigger, because now we have 150 different radio shows, and [...] you can really go deep into it and get lost, in my opinion. And I'm faced with this website every day, I can handle it, but someone who **for the first time** visits this website, maybe he or she is **totally lost**.

Jan has thought a lot about the upsides and downsides of this structure because for months, he and his colleagues were involved in developing an app for the station, and it “was perfect practice for us to get to know [...] how our own website is working. Because we really had to dig into this website, and when we saw content from the site [appear] on the app in a very compact, new style, we discovered stuff we couldn't see on the website because – I don't know - maybe you were already blind, and you couldn't see the mistakes and what you could do better. It's maybe like when you have to check a text, you change the size of the text and then suddenly you see a mistake.” Most community media practitioners have not had such an occasion to reflect. More specifically, there is perhaps a lacking awareness of there being a choice in terms of which target groups are addressed in which ways, with significant implications. What comes easiest, for the staff and volunteers at a radio station, is to think of their online content in the same terms as their on-air content. It results in transposing a station's on-air structures one-on-one to their websites – hour-long units, uploaded by show, fitted into navigational structures that are organized by date or by programme – instead of adjusting those structures to the different ways in which people use multimedia content online.

This model is also rooted in the origin of many archives. Radio stations have always wanted to use their website to share news or information about the shows they broadcast, and this could take any form, from news items about special programmes or events to a systemized programme archive where listeners could find information about the content and host of any past broadcast. This information was primarily aimed at people who were already familiar with the station and its shows. As the use of multimedia content became more common, audio files started being embedded in those items or pages – where there was any, while other items remained text-only.

This works, to some extent, for a “listen again” type purpose, aimed at regular listeners who want to catch up with a show. They will be looking for both text info and audio content, will want to do so by date and individual show, and will mostly look for whole broadcasts. A more purely “missed broadcast” model, meanwhile, only provides audio content, and presents it by date or programme without the need for much archiving detail in the form of tags or categorizations, or advanced search options.

The website of the Amsterdam's SALTO is the most bare-bones example of this. Its "Missed Broadcast" section merely allows listeners to 'spool back' its broadcasting to a specific date and time, without any further functionality. Audiovisual content can only be streamed, not downloaded, and no broadcast-specific information is available, nor any categorization or tagging of content. It does not serve to ease access to older programmes with a salience that might extend beyond the current moment.

CaribbeanFM on demand

SALTO1 SALTO2 STADSFM WERELDFM CARIBBEANFM RAZO MOKUMRADIO

**SALTO** uitzending gemist?

Kies een datum, tijdstip en klik op start

Home CaribbeanFM qids CaribbeanFM livestream

Kies datum en tijdstip  
klik daarna op START

Juni 2014

Ma	Di	Wo	Do	Vrij	Za	Zo
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

Uur: 17:00 - 18:00

Minuten: 0

Secondes: 0

**START**

Timo Stadler, who was involved with founding the *freie-radios.net* archive, expressed concerns about this model in light of the new agreement with the German collecting society GEMA. "Over 50,000 contributions from community radio stations can by now be accessed at *freie-radios.net*, which has grown in the past fourteen years to an audio archive of social movements," he told the *Radio Corax* newspaper. "I would prefer it if *freie-radios.net*, as exchange archive for word-based contributions, would not become combined too much with a media library that allows users to access full broadcasts, including music broadcasts, for several days. It would lead to a situation, in my opinion, in which the social-political content would get submerged."

### The online audience as separate or complementary universe

The content structures which grew from a desire to meet an initial online audience's needs might turn out ill-fitted for meeting new kinds of online listeners. A new generation of mobile users who do not, or rarely, listen to the station on-air might seek to mix and match interesting online audio content from community media, rather than catch up with a specific programme they know and like. They might be more likely to come across and share individual pieces of content on specific topics they are interested in through social media, than to find past broadcasts by regularly visiting the broadcaster's website.

In the most positive scenario, this could help lessen the undercapitalization of community media content by pulling in online visitors from beyond the station's regular, on-air listeners. If they become an increasing share of a community station's online audience, or have the potential to do so, the challenge will increase to adjust its online structures to these different ways people use multimedia content online – to web logic, rather than radio logic.



Those who don't primarily listen to a station's shows on-air, but are (potentially) interested in tuning into its content online might be different in several ways:

- They may be specifically interested in finding programmes to listen to on their phone, tablet or computer, and be turned off if they have to dig for audio content from archives by show or date where only some items have any;
- They may be interested in content by the subject, theme or genre of their interest, whichever show it was aired in, and be turned off by having to navigate content by programme, especially when programme names and descriptions are ambiguous or overlap;
- They may be interested in shorter, topic-specific pieces or excerpts, rather than full, hour-long shows that cover a number of different subjects;
- They may be interested in most recent content, instead of specific shows, or conversely not care at all when a show was broadcast, as long as it's on a topic that speaks to their interests.

## Struggling to balance the needs of different audiences

Many community radio sites seem to struggle with juxtaposing or integrating content structures that would serve the interests of both their regular on-air listeners and a more casual online audience. For 'umbrella' archives like the CBA, the contradictions go beyond that. They have to juggle the needs of facilitating the exchange of programmes among community media managers, playing a role in how Austrian community radio stations showcase their programmes on their own sites, facilitating the desire of individual programme makers to extend their following, and playing a socio-political role in documenting and publicly preserving community media content. The site is currently a compromise of addressing all these target uses, and Ingo Leindecker expounded on the dilemmas involved:

This was always hard for us, because we were always confronted with these [different] types of usages, also in terms of how to develop it further, what design decisions to make or what work flow should be there. [...] We try to integrate them all in some way, under the same 'roof', but this is actually something that slows the development a lot. We have to be very cautious all the time what we change, because we just have different groups of people with totally different expectations of the project.

A few community broadcasters have made a clear-cut choice to focus on either one or the other purpose. Radio Kultura, for example, has no menus by show, host or day,



despite broadcasting a live stream. The “Émissions” section of the website presents a paginated listing of recently uploaded content, which can be filtered by theme, using four broad categories: Music; “Réportages” (relatively short, topical productions); “Conférences” (edited recordings from conferences and lectures as well as some interviews); and “Créations” (the home of the station’s bilingual Culture Cube programme and assorted culture-related recordings). In the listing, each production is presented in a colour-coded ‘box’ which includes its title, duration, language and upload date, and can be clicked to “unfold” a description and tags. Each item can be streamed, downloaded, added to a playlist or shared from within the same page. “We [wanted] something without too much information, without having to go from one page to another and then again to another – we wanted to make something easy to use and graphically quite well-designed,” Mikel Etxebarria explained. As an online-only station, it also does not mix content with and without audio: everything that is listed can be listened to. The choice does have consequences: those who listen to the station’s livestream and want to quickly look up archived content from their favourite show, or find more information about what they have just listened to, will find their options limited.

Several other sites we reviewed showed evidence of a similar strategic decision to build the online archive specifically around the needs and interests of the online visitor rather than as follow-up resource to the on-air offerings. The Northern Visions archive site, established in 2013, is not structured and presented as a broadcast archive, with chronologically organized content marked with details about when they were aired or as part of which programme, but as a stand-alone audiovisual archive of video materials. Sites like the ‘Lokal’ website of Radio Corax indicate an upload data but no broadcast date for individual pieces of content; for an online-only visitor, it is irrelevant. Radio Dreyeckland has not excluded one type of content for another, but has made a deliberate choice to create a thematic navigation menu (with choices like Politics, Culture, Music, Freiburg, Regional, European) parallel to its more traditional navigation menu (which points to the broadcasting schedule, a list of programmes, information about the station, et cetera), and to make the former more prominent than the latter.

## Highlighting audio content in mixed-use archives

A key issue in the context of addressing diverging audience interests is whether audio content is presented or highlighted separately, or mixed into a general informational archive in which programmes and broadcasts are described and categorized but only some of them come with audio content.



In the latter case, a user-friendly approach would make it possible to access, filter or search for content with audio separately. This is not yet a common practice, however. In addition, on websites which list broadcasts by date as well as by programme, it is often only possible to stream or download the audio directly in either one or the other place, and sometimes the two do not link to each other.

At the Radio Študent site, only some of the broadcasts presented in the archive include audio files. For the others there is only a description and image. At the time of our website review (in 2014) none of the most recent ten archived programmes on the “Music” page included streaming audio, and only five of the last ten archived broadcasts in the Politics section; five of the last ten in the Culture section; and eight out of the last ten in the Society section. On such overview listings by category it was not indicated whether an item featured audio or not.

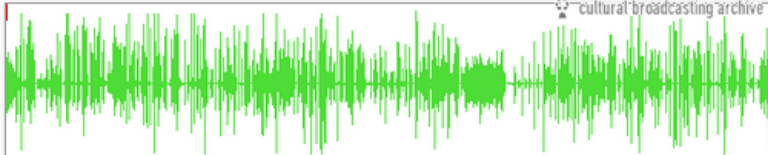
Radio Orange tackles this issue by splitting up access to its content. Alongside its archived information about broadcasts by date and by programme, the site’s “Nachhören” page presents a list of the station’s most recently uploaded 100 broadcasts, which can be streamed inline (and sometimes downloaded) and are accompanied by the first sentence or two from the description, but cannot be sorted, searched or browsed. Clicking on titles opens the CBA page of the broadcast in question, where full details and categorizations as well as streaming, embedding and downloading features are available.

The website of the Austrian community broadcaster Radio FRO divides access to its content in a similar way. On the one hand, every programme has its own webpage, with a description, the names of programme makers, and broadcast times. These pages by programme can be accessed on the website’s “Sendungen” page, which presents an overview of general themes; clicking any of the themes opens up a list of relevant programmes. Producers can add blog posts to their programme page about individual broadcasts, and if the broadcast was uploaded to the CBA, these blogs feature a “Listen to this broadcast now” link, which opens the relevant playlist on the CBA.

However, similar to the case of Radio Wüste Welle, only some of the programmes feature blog posts about individual broadcasts, and only some of those blog posts include links to listen to the audio. So on the other hand, the station’s website also features a “Sendungen nachhören” (‘Listen to programmes’) link, which always remains visible. It opens up a pop-up on-demand radio player from the CBA with a playlist of

Radio FRO's 50 or so most recently uploaded broadcasts, as well as a list of all Radio FRO shows. Clicking on any of the shows opens a playlist with just the broadcasts from that show. Neither of these options, however, allows for browsing content by category or tag, which can only be done within the CBA.

**Sie hören Radio FRO 105,0**



00:00 | 00:00

**Barrierefreiheit mit Hürden**  
Aktualisierte Beschlagwortung in Bezug auf den Sendungsinhalt folgt.

20.08.14	Barrierefreiheit mit Hürden	59:42
19.08.14	Miss T- a singer and DJ from Vienna, Live interview	59:42
19.08.14	The voice of Afrika two hours hot african tunes	119:47
19.08.14	A Interview with Hassan Bond Mussa a Tv Presenter from Tanzania	119:47
18.08.14	Rumble Radioshow 18.08.2014	59:42
18.08.14	Groovin 18.08.2014	59:42
18.08.14	Vertrauen ist gut, Kontrolle ist besser	29:34
17.08.14	Radioreisen 106 - Tonbilder Oslo	59:47

**Sendereihen auf Radio FRO 105,0**

**52radiominuten**

Sendungen der gleichnamigen Redaktion vom Verein FIFTITU%-Vernetzungstelle für... 94 Beiträge

**AK-Kultur**

Die Sendung der Arbeiterkammer im Rahmen des Kultur- und Bildungskanals auf Radio... 166 Beiträge

**Amnesty informiert - die monatliche Sendung für die Menschenrechte.**

"Amnesty informiert" ist eine monatlich von ehrenamtlichen Aktivistinnen der... 105 Beiträge

**ann and pat radio show**

ann and pat radio show 23 Beiträge

**Anstifter**

Die Sendung des Stifterhauses im Rahmen des Kultur- und Bildungskanals auf Radio... 96 Beiträge

**ANUKIS**

ein Weg ins Bewusst Sein – eine

Home → Programm

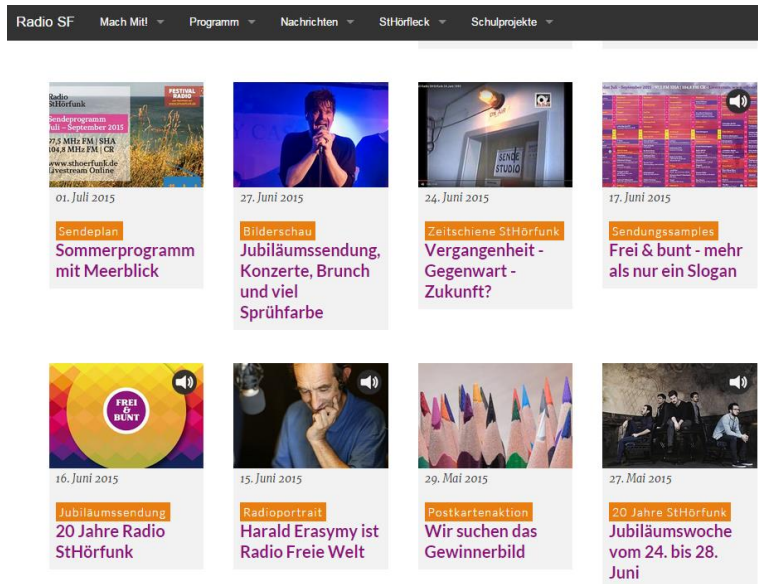
**Programm für Donnerstag, 07.08.2014** Klicke auf eine Sendung, um mehr zu erfahren.  
32. Kalenderwoche, 1. Woche im Monat

00:00	FROMat	ausgewählte Musik
06:00	FROzine	Spezialsendung
07:00	FROMat	ausgewählte Musik
<b>07:30</b>	<b>Heißer Sommer in ei afo (WH)</b> <small>afo Architekturforum OÖ - Das afo- das architekturforum oö feiert heuer sein zwanzigjähriges Bestehen. Aus diesem Anlass wird ein visionäres Projekt aus Mitte der 90er Jahre wieder aufgegriffen. Unter dem Titel „Stadt in...</small>	Kultur- & Bildungskanal
08:00	Anstifter - das Stifterhaus on Air	Kultur- & Bildungskanal
08:30	Musik für Junggebliebene	Seniorenradio
<b>09:00</b>	<b>Hohenrausch, Breaking Free, Donau Festwochen und Brucknertage 2014</b> <small>Radio für Senioren - Gesprächspartner von Walter Ziehlinger sind Nicola Howes, Manuela Kloibmüller und Thomas Wall</small>	Seniorenradio
10:00	kulturportal99	Kultur
11:00	Hungarostudio	Kultur
12:00	Open Space	Spezialsendung

Radio FRO also experiments with other ways to make it easier to identify audio content, showing how this can be done in smart yet simple ways. When accessing broadcasts by day through the site's programme calendar, the layout of the schedule highlights clearly where further information is available for a broadcast (which 'unfolds' within the page when clicked), and a simple "Play" icon highlights broadcasts which can be streamed. Radio Dreyeckland has, since our interview, introduced similar features

for its daily programming schedule, which in addition distinguishes between audio for full broadcasts and audio for individual items.

The website of Radio StHörfunk (based in Schwäbisch Hall, Germany) features a very simple way to immediately indicate which recent items include audio content: small speaker icons are added on overview pages to items that do.



## Search options and advanced search menus

Being able to search as well as browse archived content is a defining characteristic of an effective online archive, yet advanced search options that make it possible to search for content by specific attributes still seem relatively rare on community media websites, even on sites where content is categorized.

Some community media websites offer site-wide search, but no way to search the archived content specifically. The website of the community TV station FS1 doesn't merely have a site-wide search function, its advanced options offer an exhaustive array of choices, e.g. whether you want to search for any part of the word you enter, the beginning of the word, the end of the word, or results that match how it is pronounced, and whether you want to search for results in specific formats ranging from Word documents to Open Office spreadsheets. But at the same time, it does not appear to provide a possibility to search specifically for videos, or to search only within the station's media library ("mediathek").

On many other sites, it is possible to search archives of info about past broadcasts, but where audio is included for only some of those broadcasts, it is not possible to search for content with audio only.

Instead of providing an advanced search menu, the Radio Kultura 'Émissions' archive combines an option to filter content, which the visitor can use to show only musical content, for example, or only reportages, with a search function in which you can search for keywords and additionally opt to search only within one of 30 themes (from "punk" to "gastronomie" and "ecologie"). The two functions layer onto each other, meaning that the user can narrow down results for a keyword within a specific genre as well as a specific theme, but this cumulative effect is not adequately signposted. It is also not possible to search for a keyword within two themes at a time. Such a limitation can be an issue especially if a field includes a high number of options. On the Red Nosotras en el Mundo site, for example, the advanced search menu features drop-down menus to search for content within a specific theme or format, but one cannot select more than one theme at a time. This is somewhat problematic because Sound Library content is tagged with a range of over 120 themes, many of which are similar or overlap.

The default setting determining which fields are covered in any search can make results significantly more or less useful. On the Radio Kultura site, only those items are returned which feature the search query in their title or tags; the content of descriptions appears to be ignored. This narrows down the search results but makes it all the more urgent to add enough tags and choose them wisely. An opposite example is provided by the Radio LoRa website. When searching for programmes, the results appear to include all programmes where the search query was included in the description of any of its broadcasts. The result is that a search for programmes on racism yields 102 different shows.

Built-in search facilities can place a fairly heavy load on a station's resources once it has a large amount of content online, and this is why some websites default to integrating a customized Google search tool instead. However, the relative lack of advanced search features seems more related to underlying choices about the purpose of the archived content, a (perceived) lack of interest from target groups, or from the question simply not being on the radar for those building and managing the site. On the Radio Študent site, for example, there is no way to search for programmes by date, and at the Archiv 14 conference the station's presenters were blunt about why not: "it's not an archive, it's an audio portal".

## Podcast/RSS feeds

Podcasts in the form of RSS feeds constitute a simple, popular tool for especially small community radio stations to allow their audience to listen to their programming on-demand as well as live. It is often the first step for stations to start sharing audio content online, and eight of the member stations of the German federation of free radio stations



featured such a feed of recent broadcasts. Few, however, offered listeners one or more podcast feeds for specific programmes or specific themes.

The [podcast site of Onda](#) was a noteworthy exception. Listeners can subscribe to specific feeds for some individual programmes or series, but in addition – using a mix-and-match feature originally developed on the podcast page [of the Freie-Radios website](#) – also compile their own personal podcast feed with content selected by country, language, type of broadcast and/or free text search items.

The CBA provides a podcast feed for the most recent twenty additions to the archive but also podcast feeds for the most recent twenty additions by any of the individual stations that upload material, or for any of the individual programmes and series that are shared on the site. These feeds are also the basis for the customized playlists participating stations can integrate on their own websites. In addition, accessing content by tag includes a link to a podcast feed with only the content with that tag.

## Thematic or programme-based websites

Northern Visions and Radio Corax have both experimented with creating separate “microsites” or “satellite sites” for specific projects or themes.

### ***Radio Corax***

The main Radio Corax site does not feature any kind of archived audio content. Instead, a link labelled “CX-Global” points to the Radio Corax submissions on the Freie-Radios.net website. Visitors to separate sites or subsites like Lokal.radiocorax.de and Wendefokus.de, however, can find a wide range of interviews and broadcasts. The “Lokal” subsite presents content which specifically relates to Halle or the surrounding region, and features some 1,000 streamable items in total. The Wendefokus site presents interviews about people’s experiences of the 1989 revolution, as well as a number of more analytical interviews.

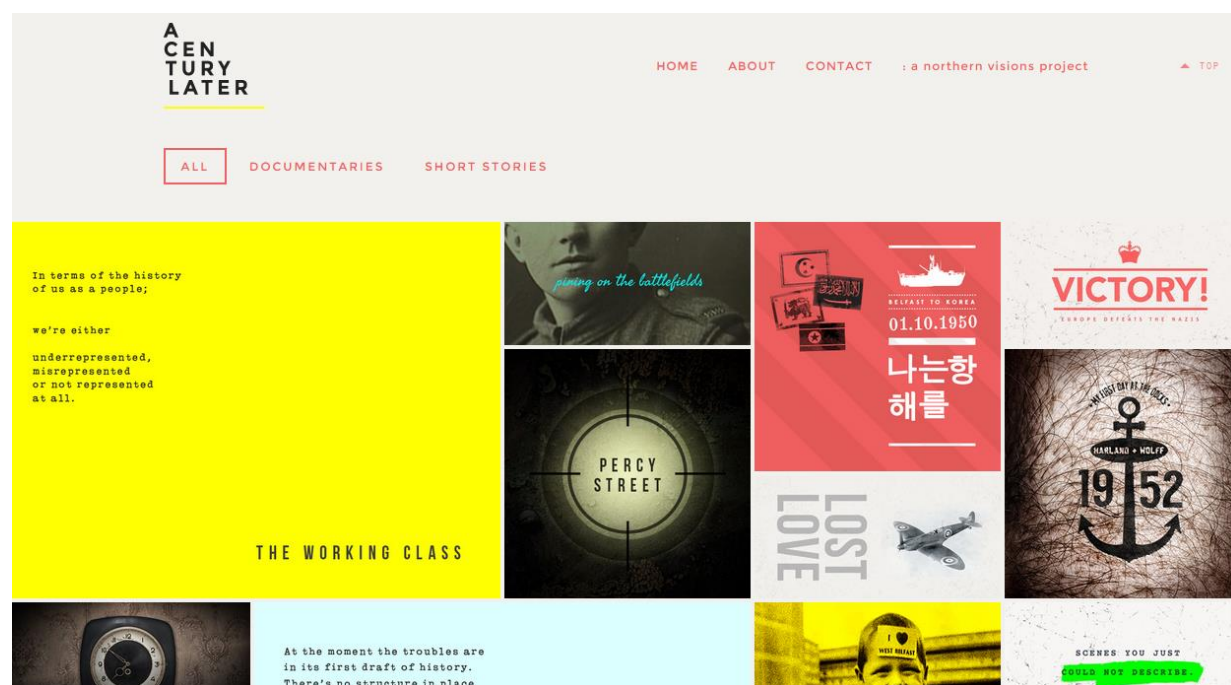
Those are just two of several Radio Corax (sub)sites that are addressed to a specific theme or target group. Radio Corax provides students at the Martin Luther University Halle-Wittenberg with the possibility to take on a traineeship at the station or take part in workshops, and the “Studis On Air” website presents student radio productions, largely focused on university-related matters. The station also experimented with a children’s site (hier-bin-ich.net); and the intercultural radio site Interaudio, which was updated up through 2012, features some 1,000 items in an “MP3 Archive”. In addition, at least one

regular programme at Radio Corax has its own site [within the Radio Corax domain](#), with streamable and downloadable audio.

## ***Northern Visions***

Northern Visions effectively separated the presentation of its archived broadcast content from the informational purposes of a website by creating separate websites for these different aims. Its main site provides general information about the centre's lines of work and projects and news items about, for example, the centre's training and mentoring projects, its work with youth and schools, and upcoming new programmes. Sample video material is occasionally included there, but all online audiovisual content can be found on the centre's general collection site, [archive.northernvisions.org](http://archive.northernvisions.org).

One of the organization's priorities is to record and preserve local heritage and oral history. The materials recorded as part of two thematically similar projects in this field are included in the main archive but also presented on their own microsites. [Our Generation](#) presents documentary features and personal stories about the community movements of the volatile 1970s in Belfast, and [A Century Later](#) presents documentaries and shorter videos in which individuals recount their personal recollections. While the *Our Generation* microsite uses the same design as Northern Visions' general archive, the *A Century Later* site showcases how establishing a relatively small, tailor-made site for a specific project can allowing for a more experimental approach.



## ***Near FM***

The Near Media Co-op in North-Dublin does not run thematically organized microsites but does make an effort similar to Northern Visions' to separate general info content about the station from archived media content. There is a general site, [near.ie](http://near.ie), a site for the radio station, [nearfm.ie](http://nearfm.ie), a separate [podcast site](#) for the radio station's archived content, and a site for the co-op's TV production arm, [neartv.ie](http://neartv.ie). As described in the "Parallel structures: pitfall or opportunity?" section, however, ambiguous practices about what is posted on the Near FM and Near Podcasts sites creates confusion on the part of site visitors and programme makers alike.

## ***Advantages and disadvantages***

The Northern Visions micro-sites, in particular, highlight the advantages of establishing separate websites for individual purposes: the possibility of creating a tailor-made, thematically appropriate design, and simpler, more narrow content structures that make it easier to find specific content. But Radio Wüste Welle serves as counterexample for this approach. The station used to run seven different WordPress blogs under different subdomains – including special sites for its local current affairs programme, women-oriented content, and a cooperation project with a city in Peru, Radio TuVilla. But they decided to merge those sites into one site.

One of the main reasons the station changed gears, Chris Wohlwill told us, was because its old structure of subdomains for various programmes meant that "every time somebody wanted to upload something that didn't really match any of the [existing] subdomains, [we had] to think about starting a new website". With the current site, any programme maker who wants to share their content online can easily do so by uploading it to the existing, unified content management system.

This issue can still be observed at Radio Corax. While some programme makers have tailor-made subsites to upload their content to, the makers of any other show who want to upload their content have to rely on using Freie-radios.net. When the makers of the Russian-language show, for example, upload it on Freie-radios, Michael Nicolai explained, "there is a tweet coming back on our start page [...], so there is a small list of I think five pieces, the last five," and that is the only way in which Corax content that was uploaded to the Freie-Radios.net site is featured on Corax's own site. This lack of a central Corax archive, as well as everpresent copyright concerns, may also help explain why programme makers choose to upload content on blogs of their own or services like Soundcloud instead.



Internally, running multiple websites with separate uploading and publishing processes can get in the way of implementing tools that can save a station time by, for example, automatically sharing and updating information across multiple pages. Externally, it is already hard for a small radio station's site to break through the clutter of online content, getting interlinked, shared on social media and ranked highly on Google. It can get all the harder when having to do so for multiple sites. Subject-specific sites can also go dormant more easily and gradually cease to function when a project finishes.

The comparison between Northern Visions and Radio Corax highlights an important condition for effectively running parallel thematic subsites: it should always be clear to visitors of the station's websites that a choice of sites exists, and easy to find them back. In the case of Northern Visions, the separate archive site and the *Our Generation* microsite both include links to each other as well as the *A Century Later* microsite in their main navigation menu, and each of the three archive sites are linked on the main Northern Visions site in a single drop-down menu labelled "More Northern Visions sites". In the case of Radio Corax, finding out about the station's 'satellite' sites and finding them back involves more hurdles. At the time of our website review, the Studis On Air site could be found through a navigation submenu item, the Wendefokus site was only accessible through an individual news item, and the Interaudio site was linked only through a logo in the footer of the site.

## Using external services to share and archive content online

Community broadcasters can rely on external services to share and archive their content online for two distinct and sometimes complementary reasons.

Especially smaller stations with fewer resources might not see realistic opportunities to create archiving structures on their own website, because they lack employees or volunteers who have the capacity, interest, and time to work on them, the financial resources, or both. More specifically, they might not see opportunities to create any such structures that would be more functional than the alternative: uploading content to an external resource and then embedding individual pieces of content or feeds of content on their own website, or simply linking to their channel or page on the external site.

Second, community broadcasters might use external services in addition to their own online structures in order to increase the visibility of their content, or to more easily share programmes with other community stations. A further, minor reason to use external services might be to cope with restrictions around including copyrighted musical content in the broadcasts they upload. A commercial service like Mixcloud,

where listeners can stream but not download content, provides some protection in this regard, and occasionally broadcasters will resort to uploading content to an archive in another country.

A major distinction should be made between the use of commercial, third-party services like Soundcloud, Mixcloud, iVoox and Vimeo, and the use of non-profit ‘umbrella’ archives that are established by national federations of community broadcasters or individual partnerships of community radio stations. The latter provide more autonomy and control for the community media which upload content, but are only available in some countries. In both cases, however, community media have to countenance the possibility that any such external service might collapse or disappear at some point, taking their archived content, structures and interactions down with it.

### National ‘umbrella’ archive and programme exchange platforms

At the moment, the two countries where national federations of community radio stations are running programme exchange and archiving services are Germany and Austria.

Germany’s **Freie-Radios.net** website has been online since 2001, and functions as the exchange server of the project *Freier Funk im Netz*, which is undertaken by the German association of free radio stations (BFR) in partnership with its Austrian (VFRÖ) and Swiss (UNIKOM) counterparts. The website serves primarily as programme exchange platform. Each participating radio station appoints a “portier” or “portiere” to be the station’s contact person for the archive, who also becomes part of [decision-making processes](#) about the service and is in charge of providing other people at their station with password access if needed.

The site allows for making content accessible only to other, logged-in members, for example if the broadcast includes rights-protected content which is free to broadcast by other stations but not to reproduce online. The majority of content, however, is public, and alongside its programme exchange purpose the site presents an archive of fifteen years of community media broadcasting which anyone can explore.

In addition, the service makes it possible for community broadcasters to upload content to Freie-Radios.net instead of having to host it themselves and build structures for it on their own websites. Stations like FSK and LoRa München upload their content to Freie-Radios.net and then integrate it in their own websites by linking to it or embedding it. Other German stations provide some audio content on their own sites but link through to their content on Freie-Radios.net for a fuller range of programmes or additional possibilities to search its content. Conversely, broadcasters which do archive a large

amount of broadcast content on their own sites might only upload a selection of this content to Freie-Radios, for example any content they consider to be of national interest.

Radio Corax sometimes uses the Freie-Radios.net archive also as a tool for accessing and sharing content that was produced by volunteers outside the studio. “Not everyone who does Corax has to do it from Halle,” Michael Nicolai said – there are people in Berlin, Frankfurt, even the US who have produced content for the station. Uploading it to Freie-Radios.net makes it available for everyone, “but we get it in this way as well.” In total, he estimated, “I would say there are about 30-40 persons with access to the freie-radios website who are using it”.

Austria’s **Cultural Broadcasting Archive (CBA)** was launched in 1999 as an initiative of the VFRÖ. Both community radio stations and individual producers can upload a variety of materials to the site, though the archive overwhelmingly consists of audio content. The CBA serves as programme exchange platform as well as podcast provider, but also describes itself as a living, historical document which chronicles social events and developments, and a “pool of alternative media reporting” which serves the purposes of researchers and individual listeners alike.

In its role as podcast provider, the CBA goes further than Freie-Radios.net in the tools it provides. Participating stations can integrate the RSS feed for their content on the CBA into their own site’s native design, as Radio Orange for example does on its [“Nachhören” page](#). But the CBA also provides a pre-formatted on-demand player which stations can embed on their site (or link to, so it appears as pop-up window). The on-demand player can showcase playlists of their most recent content in general or the most recent content for any individual programme, and stations can set which level of detail should be shown within the player, in a choice of designs. An optional audio waveform image adds a visual touch.

Both services present an enormous quantity and range of community media content. If anything, the Freie-Radios site is too modest in announcing, on its homepage, that the archive includes “over 30.000 contributions”; at the time of the website review, there were already close to 42,000. The site also makes it possible to upload “raw material” in addition to edited content, and this has been used over the years to upload over a thousand items like full recordings of speeches or lectures or full interviews. At the time of our website review, the CBA contained over 45,000 audio files as well as thousands of images. In addition to presenting content from 28 radio stations, the archive includes [a separate section](#) for materials that were not produced for or by a radio station, for example interviews, lectures and other audio materials from the weekly newspaper *akin* and the trade union IG Kultur.

The sheer size and long history of these services do not, however, guarantee their long-term survival, even if both are currently in no danger (as of November 2013, the CBA had 4,000 listeners per day, double the amount of the previous year). In France, for example, **EPRA** provided a programme exchange platform for community radio stations which existed over twenty years. It was sustained by long-term funding from the Ministry of Urban Affairs, and every year the 171 participating radio stations shared around 400 hours of programming. EPRA helped fund the production of this programming as well as the sharing platform itself, indirectly allowing community broadcasters to employ 200 journalists. Having operated precariously in its last three years, EPRA had to shut down at the end of 2013. The fate of the 11,000 hours of archived content which had been accumulated over the twenty years of the network's existence was uncertain. The French National Audiovisual Institute (INA) expressed interest in securing this extensive collection, but this posed significant practical obstacles concerning copyright, potentially requiring "the renegotiation of thousands of contracts with content producers and radio stations".<sup>5</sup> In the "Future proof media" section of this report, we have already described the cases of three former online sharing and exchange platforms of community media elsewhere: RadioSwap (Belgium), Cross-Radio (former Yugoslavia) and StreamOnTheFly. Meanwhile, we have frequently referenced the online programme exchange platform in Ireland, run by the Community Radio Forum of Ireland (Craol). While featuring a total of over 300 items, it seemed to have run its course at the time of our website review. A number of the items that were listed as having a broadcast shelf life until the "end of the month" were in fact two years old and the most recent programme we could track down was about a year old.

## Strengths and weaknesses

In spite of concerns about community broadcasters relying on an external service to build an online archive of their content, our research suggests that the presence of overarching community media archives in Germany and Austria has materially improved the scope and models of archiving being followed there. The existence of the CBA and Freie-Radios.net has helped community media publish broadcast content online when they would otherwise not have been able to; to highlight or integrate it on their own sites

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<sup>5</sup> See Erwan Manac'h, "Radios associatives : la banque d'échange des programmes est menacée", Politis.fr, 26 November 2012, <http://www.politis.fr/Radios-associatives-la-banque-d-20200.html>; Clémence Jost, "Liquidation de l'Epra : des milliers d'archives radiophoniques réduites au silence", Archimag, 15 November 2013, <http://www.archimag.com/article/radio-liquidation-epra-archives>; Erwan Manac'h, "Radios associatives : le fonds d'échange des programmes entre en « liquidation »", Politis.fr, 10 December 2013, <http://www.politis.fr/Radios-associatives-le-fonds-d-24908.html>; Thierry Borde, "L'INA, l'EPRA et la mémoire des radios associatives", Médias citoyens, 1 December 2014, <http://www.mediascitoyens.eu/2014/12/lina-lepra-et-la-memoire-des-radios-associatives/>

even in the absence of their own online archiving structures; and to effectively share it with active networks of fellow community radio stations.

In addition, the presence of these services has fuelled a greater consciousness about the importance of sharing content online and archiving past broadcasts. The fact that the Austrian association of community radio stations took on this project “of course led to a bigger discussion in the radio stations as well,” the CBA’s Ingo Leindecker said: “The awareness just grew and grew. It’s a process which every radio has to go through in some way”.

It is probably no coincidence that few German and Austrian stations rely on commercial third-party services, when the use of services like Soundcloud, Mixcloud or iVoox is widespread elsewhere in Europe. Considering the pitfalls that are inherent to depending on commercial third-party services, this could be interpreted as evidence that the CBA and Freie-radios.net are successfully fulfilling one of their roles. Moreover, both archives are characterized by a relative thoroughness in detail and consistency of information. Content is to the point and functional, and relevant information is easy to find.

This does not mean, however, that both services don’t have individual weaknesses which are worth taking into consideration.

Both sites are lacking in design and presentation. There are no news items to highlight especially interesting new content, and no or few images. The Freie-Radios website, in particular, very much looks the part of a programme exchange platform: no-nonsense, with detailed information and search and categorization options, but visually poor. Its outdated graphical design, which sports a vintage Internet colour scheme, has not been significantly updated [since 2001](#).

It’s “not very sexy and glamorous,” a survey response from FSK remarked, adding that “it fails to attract general audiences, at least that’s my impression”. Nor are broadcast descriptions written to attract them. They are firmly focused on the needs of those making decisions at community radio stations about which content to rebroadcast: detailed, functional, sometimes somewhat technical. One interviewee, talking about instructing programme makers how to write an interesting online teaser, went as far to say: “I think Freie-Radios is a good example because we can say, look, *not* like at Freie-Radios!”

Home

Hörbar

Archiv

Kategorien

Podcast

zip-fm

Suchen

Senden

Anmelden

Über uns

Freie Radios

Links

Kontakt

E-Mail

zip-fm

zip-fm.net

Sendeplan

BFR

Homepage

# freie-radios.net

Audioportal Freier Radios

## Alle Archiv-Einträge

42035 Titel - Anzeigen der Datenbankeinträge sortiert nach:

ID ▼	Datum	Titel	AutorInnen	Sprache	Beitragsart	Serie	Länge
<b>Because it's Malfoy - chapter 10_1</b>							ID 65748
FSK		Eine schwule Seifenoper zum Hören romantic fanfiction slashing Harry Potter / Draco Malfoy by Sara's Girl "Reparations" gelesen u übersetzt von k kater chapter 10 "I used to think you loved attent ...					25.08.2014 32:45 min
<b>Nicht die Grenzziehungen oder Israel sind das Problem des Nahen Ostens, sondern die Verfasstheit der Staaten</b>							ID 65747
RDL		Im Gespräch mit Radio Dreyeckland führt Thomas von der Osten-Sacken, von der Hilfsorganisation Wadi aus was er für die Gründe des Aufstiegs von IS (ISIS) und ähnlichen Radikalen Fundamentalisten und Nationalisten im Nahen Osten hält, nä ...	Jan Keetman				25.08.2014 10:30 min
<b>Freiheit statt Angst - Gegen Überwachung auf die Straße gehen</b>							ID 65746
corax		Unter dem Motto 'Freiheit statt Angst' ruft ein breites Bündnis dazu auf, für Freiheit und den Schutz der Privatsphäre zu demonstrieren. Am 30. August wollen Menschen durch das Regierungsviertel in Berlin ziehen und gegen die ...	Tagesaktuelle Redaktion.				25.08.2014 12:29 min
<b>Der kurdische "Staat" ist nur ein wenig besser als die Region, die IS hervorgebracht hat, aber immerhin</b>							ID 65745
RDL		Im zweiten Teil des Interviews wird Thomas von der Osten-Sacken					25.08.2014

[de]

[en]

[es]

[it]

[fr]

On the CBA site, and paradoxically enough especially its homepage, the default lay-out of the underlying platform seems to show through, with little customization of design elements or default fonts. At the same time the site features more sophisticated, user-friendly design elements when filtering content by theme or browsing through the sleekly designed pages [for individual broadcasts](#).



cultural broadcasting archive Login · Hilfe · Info

[Aktualität](#) [Themen](#) [Tags](#) [Stationen](#) [Sprache](#)

## Consumo Ergo Sum – Voyage Orage!



**CES11\_VoyageOrage** 56:57

MP3, 128 kbps  
52.14 MB

[Weitersagen](#) [Abonnieren](#) [Einbetten](#)

Diese Datei enthält urheberrechtlich geschütztes Material Dritter und kann daher nicht heruntergeladen werden.

Varia Belle und Audrey Monde haben zwar die Hitze satt, aber nachdem sie sich aufgrund eines misslungenen Eisbärenschmuggels nicht mehr in die Kühle wagen können, entscheiden sie sich für einen Kultururlaub im Süden. Da die beiden aber nicht unbedingt der Orientierungskunst frönen, müssen sie sich durch All-Inclusive Clubs, die Individualtouristerei, den authentischen Urlaub am Land und die Entspannungshotels kämpfen.

Mit auf der Reise sind Herr Zellmann, der die Freizeit erforscht, Nina Hagen, Boney M. (ja, wirklich) und andere Suchende.

Happy Holidays wünschen  
Varia Belle und Audrey Monde

**SENDEREIHE**

**Consumo Ergo Sum**  
Zu hören auf [Orange 94,0](#)

**INFORMATIONEN ZUM BEITRAG**

Produziert am: 30. Juli 2012  
Veröffentlicht am: 02. August 2012  
Thema: [Gesellschaft](#)  
Sprachen: [Deutsch](#)

**MEDIENINHABERIN**

 Yulia Gros Wichtelgasse 12/18  
julia\_gros (at) yahoo.de  
Consumo Ergo Sum

**MEHR VON DIESER SENDEREIHE**

**ÄHNLICHE BEITRÄGE**

**Kommentare**

This awkward mix of appearances limits the public appeal of the site and might make it seem less professional than it actually is. “The CBA is a great archive, with almost 50,000 files, and very good,” Jan Hestmann from Radio Orange said, “but the design is like ... I still see that when [young] people come to the radio and they say, can I upload my show too – and we say, yeah!, we have this CBA - and they say, no, I want to upload it on Soundcloud.”

In a way, these archives are hiding their light under a bushel. The CBA has no Twitter feed of its own, and there are rarely posts on its Facebook page, while Freie-Radios.net has no Facebook account of its own. If the design, structure and outreach of both sites don't seem well prepared for serving a broader online and mobile audience with an interest in 'snacking' on community media content, however, it is in part because it is not a priority for a significant part of their users. Of the 36 user alerts which logged-in users have filed on the [support system/bug tracker site](#) of Freie-Radios.net over the course of over five years, most are about changing or expanding the upload form, and few or none about the public-facing site's design.

The site is “quite useful,” Radio Wüste Welle's Chris Wohlwill said, “but I would try to make it a little less ugly, at some point. But they don't seem to be very interested in that. It's more, for them, a platform for collaboration of community radio stations. [...] I think if

you programme a new user interface, and use the existing data and files, you could make it interesting to a general audience as well. [...] I don't think it's hard to do both at the same time”.

Ingo Leindecker observed a similar mix of use cases in the descriptions that are provided with broadcasts being uploaded to the CBA:

How contributions are described [...] shows how people see this platform. There are a lot of people who just work [...] from this background of a rebroadcasting and exchange platform, and formulate their texts in a way that is most likely to be usable for [...] programme coordinators. There are others who are more aware of speaking to a broader audience. Of course the language and how they present their content is really different. This is a problem also, because you get very different outcomes and qualities in the way content is described.

Process-wise, cross-posting content to an ‘umbrella’ archive as well as a station’s own site usually involves some duplication of work. In Ireland, where radio stations had to separately upload their broadcasts to the Craol programme exchange platform and to their own sites, Diarmuid McIntyre said, it meant “doubling the burden, doubling the process, the tagging, every single step concerned,” and significantly discouraged participation in the platform.

Different stations have wrestled with this issue in different ways, trying to develop shortcuts or work-arounds. Radio Dreyeckland has decided to upload files only to its own website, Andreas Reimann explained, “and then most of them are also available on Freie-radios.net, but only as a link to our website”. At Radio Wüste Welle, Chris Wohlwill said, “we’re thinking about building an API plugin for Freie-Radios, so the people who traditionally upload to Freie-Radios can also put that up on our website and you can listen to it here”. That way “people don’t have to upload twice.”

Radio Orange made a more drastic decision. When she joined the radio station, Sibyl Moser recounted, she saw that programmes were being archived in two different places – on the CBA and on the station’s own site – and decided that this did not make sense. The station shuttered its own online archive and started only using the CBA, and the tools it provides to integrate CBA content into any participating station’s website.

Talking about the pitfalls of duplicating efforts as well as the dilemmas of copyrighted content, Diarmuid drew an alternative and far-reaching conclusion about how a new programme sharing model should be structured. It should be decentralized, he argued, based on “identifying the systems that stations are currently using,” and this should be facilitated by developing more standardized ways of creating content:



[The difference] between community media and commercial and public service media, to my eyes, [...] is **in the creation of the programmes**. So if I go into the BBC they will have standardized ways of cataloguing running orders, they will have systems that are searchable in the creation of those. [Whereas different community] stations will mix paper, electronic forms that are different, [...] using different things even within the stations. So [...] the work that needs to happen comes with regard to the process of programme-making in the first place. [...]

The focus, to my mind, having gone through the whole process, of designing a technological solution to archives and under what categories and under what types and all that, is **a misdirection**. It's secondary, but it's driven by a lot of people who happen to be technically minded within the community media sector. [...] **Community media should stop thinking that it needs to design its own technological solution, and borrow from systems that already work**, but set itself the challenge to say, if those are systems that already work, **how do we design the human processes that interact with those**, way back [from] the day when someone walks into the studio with a piece of paper that says, this is whom I'm going to interview.

## Commercial third-party services

The practice of using commercial, third-party services like Soundcloud, Mixcloud, iVoox, Bandcamp and Vimeo for part or all of a station's archive is wide-spread, especially with smaller stations without the resources to build their own website structures, and more so in some countries than others. In Spain, for example, iVoox "is king," AMARC Europe's Miriam Meda said. Radio Campillos, a community broadcaster in Andalusia, has uploaded 1,030 broadcasts to iVoox, and that's a relatively modest number. The Catalan station Mataró Ràdio has no fewer than 22 thousand broadcasts on that site, organized in some 100 podcasts.

**Mataró Ràdio**  
Canal creado el 25/10/2010 - Idioma: castellano, català <http://mataroradio.ivoox.com>

Por: mataro\_radio

- Ver los audios de este canal (22093)
- Colabora en este canal
- Radio Online Mataró Ràdio
- Ir al sitio web de este canal
- Llévatelo a tu web o blog
- Compártelo en redes sociales

**Sobre el canal Mataró Ràdio:**  
Aquest canal ens permet accedir a tot el contingut que s'emet a través de Mataró Ràdio. Aquí podeu trobar tots els programes i també els especials que fem al llarg de l'any.

**Podcasts en Mataró Ràdio (100)**

Podcast	Ranking iVoox	Ver audios
<b>Informatus</b>	hoy Ranking iVoox: 7922	Ver audios (3315)
<b>Viu la vida, dia a dia</b>	hoy Ranking iVoox: 5864	Ver audios (1993)
<b>Al so de la tenora</b>	hoy Ranking iVoox: 14025	Ver audios (12)
<b>La cara B</b>	hoy Ranking iVoox: 5594	Ver audios (12)

CUAC FM had uploaded an even higher number of broadcasts to iVoox, before developing a more hybrid model, which still utilizes iVoox but provides more autonomy

by channelling a feed of its content through the service rather than uploading and hosting all the content on iVoox itself. In other countries, Soundcloud and Mixcloud are more popular, while Vimeo is the service of choice for many community TV stations.

Stations use such external services in different ways. Some broadcasters upload their content to sites like Soundcloud and simply link to their feed there on their own website, or embed a feed of their most recent uploads. For example, the navigation menu of the Radio Campillos site includes a page labelled "Audioteca", but at the time of our website review it merely [featured two links](#): one to the station's channel on iVoox and one to a pop-up player with its latest uploads to that site. At other stations, externally hosted content will sometimes be embedded in news items or other pages, but not in a systemic way. Northern Visions and Near TV, however, have online archive structures on their own sites, but upload the actual audiovisual content to an external service – at the time of our website review, Northern Visions had uploaded 549 videos to Vimeo – and then embed those files individually in their archives. Radio Študent uses Vimeo as well in this way for the "RTVŠ" section of its website, where you can access video material ranging from short clips from the station's [Tresk festival](#) to 100-minute recordings of [radio shows](#) or local [Student Union meetings](#). Each item is described, categorized and tagged within the local archive structure, but the video content is uploaded to Vimeo and then embedded in the item. The same videos (over 300 of them) can also be sorted and searched on the Vimeo site using that site's standard tools, including by date and number of plays.

Irola Irratia, a [Basque station](#), presents an unusual exception since it uses Archive.org for its uploads rather than a commercial service. On its own website, the "downloads" navigation menu item simply points to the results of a search query for "programasirola" (Irola programmes) on Archive.org – a list of [over 1,000 items](#).

There are a number of reasons why using services like Soundcloud, Mixcloud or iVoox can be a tempting proposition for community broadcasters. They provide ready-made, easy to use structures, which don't require much in-house technical or programming know-how. They provide immediate access to an already existing, pooled online audience. They offer free accounts for smaller amounts of content and relatively cheap packages for more extensive collections: "We don't have to expand the hosting anymore if we're using" Soundcloud, Near FM's Paul Loughran observed. Mixcloud is used especially by music programmers to avoid concerns over copyrighted content, Paul added: "We have a number of presenters who like to have their programme up on Mixcloud every week, and they're given the skills to do that themselves, if they don't already know." Specific reasons community media practitioners mentioned to use them included the easy options for sharing content through social media and the form and

availability of statistics. If a broadcaster's own website structures for presenting broadcasts online lack tools like tagging, uploading broadcasts to one of these services instead presents additional features.

Especially if a radio station's motivation to upload content is overwhelmingly just to increase its audience for its current broadcasts rather than to archive in any longer-term sense, the appeal is easy to understand, and archiving content online in any way is arguably better than none at all. One could even cite a broader trend of companies defaulting to using existing, successful online services instead of making costly investments in developing their own. Nevertheless, even aside from any principled objections to helping commercial services make money with community media content, there are a number of significant downsides:

Loss of autonomy. When a community broadcaster hands over its content and delegates the online preservation and availability of that content to a third-party company, it becomes dependent on the decisions and fortunes of a commercial company that does not necessarily have its best interests in mind. The company could suddenly start charging or increase fees, it could remove an account without explanation or means to appeal, and it could change, limit or expand features and structures at will. It could be bought up by another company and change the nature of its service.

Uncertain lifespans. At the height of MySpace's popularity, few would have predicted its demise as social network and the speed with which it took place. If a company shuts down or transforms itself into a different kind of service, it might or might not provide a timely and functional way for users to rescue their media content; and even if they do, any audience interactions the station would have built up on the site would likely be unsalvageable. "This is really a threat, a big threat," the CBA's Ingo Leindecker said. "When you act in the net sphere as a free medium, you have to have your own infrastructure, you have to have a real independent provider at least. [...] The awareness is not there, but it's quite clear that if you use Soundcloud for instance, in some years, your archive won't exist anymore. The problem is the more data you put into the cloud, you also get rid of your own structure behind it, and the metadata collection also."

Restricting future development. When a radio station develops its own online archive, it can expand or tailor the structure and features of that archive according to its means and preferences as the amount of content grows, additional resources become available, or priorities change. Using a third-party service locks a station into a definite model and the limited scope of categorization and structuring options the service offers. While some hybridity in using external services and developing new in-house solutions

is possible, as CUAC FM demonstrated, it requires the kind of know-how that could also be applied to building one's own online archiving structures altogether.

Confusion. If a station uploads part of its content to its own site and part to an external commercial service, it increases confusion on the part of visitors about what they can find where. "The volunteers put [their programmes] as podcast on our website, and the [programme made by] the interns goes on Soundcloud," Radio Stadtfilter's Anna Tavernini explained in May 2014. "It doesn't really have a reason, it just happened. [...] We have a small window from Soundcloud on our website where you can see the five latest things [we] uploaded, [but] you cannot really see, just as an interested person, any logic". At minimum need, a station would need to clarify internally which content goes where, and provide access to both kinds of content in one place on its website, preferably with indication of what kind is accessible where. Even then, however, it would leave users without means of searching all content. Embedding content may also lead to some minor confusing redundancies. For example, the way Northern Visions uploads videos to Vimeo and embeds them on its own sites creates duelling sharing options, with the link being shared pointing to different websites.

Obviously, Ingo Leindecker and Thomas Diesenreiter would prefer to see community broadcasters upload content to the CBA than to commercial services. But Thomas was philosophical about the prospect. "The Internet is still a very young medium and I think we as a society are still learning how to use it, and all these cloud platforms that are easy to use and for many use cases are probably an interesting option, it will take some more years until people realize what the negative sides are. Things we talk about all the time, when we get asked, like you don't own the data anymore and you can lose it - people have to learn on their own."

## Visual design and the mobile age

Among the websites and, specifically, online sharing and archiving structures we reviewed, the best examples benefited from attractive, clear and up-to-date graphic design, which supported rather than distracted from featured content, and was consistently applied.

The graphic design of the Northern Visions sites, for example, is modern and professional, and possibly the element that makes its sites stand out most compared to other community media archives. The Northern Visions general collection site was also the only one among those we reviewed which introduced an opportunity for the visitor to customize lay-out elements for all its listings, whether by category, collection or tag, on the index page or in search results. The 'Lokal' site of Radio Corax, meanwhile, has the

kind of bright and light feel, with plentiful visual content but a discreet, unobtrusive design, which typifies many newly designed sites. The way the Radio Kultura site presents items in its Broadcasts section, as colour-coded individual blocks with intuitive icons which can be ‘unfolded’ for more detail, illustrates how a large online audio archive can be made attractive and easy to access.

There were contrasting examples as well, however. The graphic design of the Freie-Radios.net site, discussed above, has remained fundamentally unchanged since 2001. The design of the Craol website and its programme exchange section constituted an improvement on the text-heavy design of the site [until 2009](#), but remained outdated and clunky, typified by some feature/information overload on the site’s homepage, and confusing parallel navigation menus at the top and bottom of the page (with the latter including a couple of options that do not work). The Craol site also demonstrated how quickly minor problems emerge once a site is no longer maintained frequently: in the Radio Stations section many logos did not appear anymore and about half the links to live feeds and social media channels no longer functioned.

The Near FM site features a clean design and often uses a mobile-friendly pictorial layout, even if the quality of the images is inconsistent. But the Near Podcasts site appears to be a lightly customized standard WordPress site, using a design theme called “Mystique,” and the result looks dated, with a night sky background and clunky MP3 buttons. Some other websites feature bold design choices, like the white fonts on black backgrounds and highlighted content in bright green on the Radio Orange website.

Radio Orange’s Jan Hestmann emphasized the importance of appealing and up-to-date design. Many otherwise well-functioning archives “don’t look very... like they have arrived in the present,” he said, noting that “many people in the community radio area still think that it’s only about talking and the fancy stuff is not really important”. That’s problematic, he argued, also in terms of “capturing new people, younger people”. An outdated visual appearance can make casual visitors assume the content is not being updated or particularly topical, and could also make it harder to motivate one’s own volunteers to engage with the station’s online content.

Many community media stations we reviewed did overhaul their sites relatively recently: Dorf TV, Radio Kultura and Radio Wüste Welle in 2014, Northern Visions and Tilos Rádió in 2013, Radio Študent and Radio Orange in 2012. But Radio LoRa’s site, for example, has not been redesigned in almost seven years. There seems at times to be an inverse correlation between attention to archiving detail and quality of graphic design. When browse, search and filter options, descriptions and tagging are provided consistently and function well, less attention seems to have been devoted to graphic design, and vice versa. The dilemma, especially for community media with limited

funding, remains how to marry a sophisticated level of detail and customization with public- and mobile-friendly design.

### The mobile age and new design requirements

The mobile age: just when you thought you had a decently functioning online archive, there is a massive switch in how people consume web content, with accompanying requirements in how content is designed and structured. Globally, the advent of mobile-friendly design patterns has coincided with - or brought about – a broader rethinking of the visual logic of websites, away from the skeuomorphic design that brought us hierarchical folder structures and news sites with the layout of a print newspaper. Research suggests that this rethinking has shown substantive results. A recent study found that “news sites with modular, image-heavy designs can receive “at least 90 percent more unique pageviews” and help users recall “details of the articles at least 50 percent more often” than sites with classic, newspaper-inspired designs.<sup>6</sup>

Some of the websites we reviewed, for example Radio Študent’s site, featured the kind of pictorial lay-out favoured by mobile users, but they still made up a minority. It’s a challenge which might surpass the capacity of community media to build their own structures. “As we changed the system to Drupal, “mobile first” was our slogan,” Radio Dreyeckland’s Andreas Reimann said, but added that this time, “we had someone who developed it, an external developer. I think it was necessary, it wasn’t possible to improvise” anymore.

The nearby station Wüste Welle, lacking resources for another overhaul, is still forced to improvise. Its site is now “completely HTML5,” Chris Wohlwill explained – no more Flash content which doesn’t reproduce on iPads and iPhones – but it is still “not a good experience to go through Wüste-welle.de on an iPhone”. The layer “doesn’t scale”, he explained, so “you have to zoom in and zoom out everywhere to read”. The website’s current structure is simply “too complicated to really put on a mobile platform, so what we were talking about is, once we have the website running, we’ll do a mobile version that uses the same content but offers less of it, and in a different lay-out. But that’s ... definitely not this year.”

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<sup>6</sup>Joseph Lichterman, ““Modern” homepage design increases pageviews and reader comprehension, study finds”, NiemanLab, 28 July 2015, <http://www.niemanlab.org/2015/07/modern-homepage-design-increases-pageviews-and-reader-comprehension-study-finds/>



## Development of apps

Even more so than with website development in general, app development poses a challenge in terms of adapting to rapidly changing requirements, as mobile platforms succeed each other relatively quickly and such changes can easily disrupt the functioning of existing apps. Only a few pioneering community broadcasters have developed mobile apps so far, for example Radio Orange (the [o94 Radio App](#)); Tilos Rádió (apps for [Android](#) and [Windows Phone](#)); CUAC FM; and perhaps surprisingly, the self-described “pirate Internet broadcaster” [Punksender.de](#). In addition, Sabine Fratzke of the German community broadcaster Frei FM presented development plans for a collaborative Freie Radio App at the Community Media ‘Future Workshop’ 2014 of the German federation of free radio stations (BFR), which as of August 2015 was still being tested.

The Radio Orange app provides a reminder function for the next broadcast of your preferred shows and a favourites function to more easily access archived broadcasts of the shows you love most. It also provides a feedback option which “makes it easier to get in touch with the individual radio makers,” as promoting greater interaction was one of the station’s prime motivations for creating the app, and a function to more easily share content, since a survey of programme makers showed that they would like to see more promotion of individual programmes rather than just the station overall. These “are partly features we took from the social web,” Jan Hestman explained, “just because people, when they see it, they know what to do.”

The development of the collaborative [“Freie Radio App”](#) is aimed at creating a mobile tool that would help listeners find back programmes of their interest from among the current live streams of German community media. Participation would be open for all member stations of the BFR, but would require them to create and update XML files in which their programmes are adequately labelled in terms of their scheduling, type and content or genre.

## Use of interactive, innovative visualizations

Innovative visualizations like maps, timelines or narrative visualizations are very rarely used, despite their potential to help and encourage visitors to explore archived content, and in spite of the availability of free or low-cost options like TimelineJS, CartoDB, Tableau, Google MyMaps, and many others. Exceptions tend to be fairly straightforward: a Google map with the location of participating stations on the Red Nosotras en el Mundo site, a tag cloud in the Cultural Broadcasting Archive. The website of a specific Orange project, [Stadtradio mobil](#), features an interactive map as

homepage; the visitor can open locations on the map and hear sound recordings from the area.

The CBA homepage links to an experimental timeline/semantic web visualization, which was to serve as “interactive tool to explore the archive,” but it was created in 2006 as part of an artistic project and hasn't been updated. Although it comes with ample instructions, it might also have been too experimental a way to navigate the content to serve any general interest target group.

A lack of time and mindspace, rather than funding, appears to drive this lacking use of visualizations, perhaps further demonstrating the shortage of staff or volunteers with specific online interests at community broadcasters. To help and encourage community stations to experiment more with these formats, the Cultural Broadcasting Archive developed an open source [visualization tool](#) as part of the Captcha project, which provides easy-to-use ways to structure, narrate and visualize collections of broadcasts in the form of maps, timelines and three dimensional layers.

## Future visions

We have highlighted some current trends in how community media are structuring their archived content online, from refocusing content on an increasingly online-only or online-first audience to erasing the boundary between website and archive content altogether. But what intriguing future prospects emerged that went beyond those parameters?

### Dorf TV: Community media for the digital native generation?

While many stations are busy trying to adapt their traditional radio production and broadcasting practices to the digital era by adjusting, tweaking and adding services, Dorf TV is an interesting model because the founders embraced the new patterns of media consumption, participation, and production from the beginning, and rethought their model from scratch to reflect them. On the broadcasting side, “user-generated television” makes up about a third of the station’s new output every week, Otto Tremetzberger explained:

We developed this concept of a looped TV programme. We have a loop, which consists of, say, ten videos, and this loop runs between 12 o'clock and midnight. And if somebody uploads a video, and the programme director says it's OK, the video is programmed into the loop, and when the loop next time starts, this new video is part of the programme. So this is a totally different concept from this scheduling of [programmes from] eight o'clock to nine o'clock, nine o'clock to ten



o'clock [...]. It's like a dynamic playlist, and when we go live on air, we just stop the playlist, make a live-show, and then the playlist starts again [...]. Every manipulation of the programme – the uploading process, as well as when a video is added on the playlist, it's all online, it's not a computer in our server room.

In terms of the dissemination of content, Otto emphasized, it is no longer “a question of what kind of broadcasting distribution is more important,” on-air or online. “It's a hybrid thing. And that's the way Dorf TV understands itself: we're not a TV that is also online, we're not an online portal that is also on TV”. Dorf TV is, in effect, “a hybrid of TV and Internet.” That's also why its online content is no longer presented online as a “broadcast archive” but as “videoportal”.

On the production side, Dorf TV created processes based on the observation that many creative and engaged people in the region already produce and disseminate videos online. Instead of trying to pull them into structures of in-house production and set broadcasting times, the Dorf TV founders thought, how can structures for community media content be built accordingly?

Because of what we know [about] the way content – the way videos, the way text information is generated nowadays, you can see it on Facebook, you can see it on YouTube, a lot of people are investing time, it's the way content is generated and delivered – we thought that this way of production can be useful also when thinking about TV. [...] We made a study a few years ago, and from that study we know how many people would be interested in uploading a video to Dorf TV. [...] That's why we said: you can upload your file, and then it's going to be broadcast. Because uploading a video file is heavily used in the Internet, on social media, and we thought, why not use this form of generating content, user-generated content, as idea for a TV programme?

In practice, as a user, Otto explained, you can “upload a video file and broadcast it on Dorf TV without any kind of physical contact with us, but as a user you can also come to us and make a show in our studio – or you can find other ways of making a programme for Dorf TV, like sending us an email with a video file, and so on.”

This model also makes it possible to be more flexible in terms of how content is shared and presented. The station itself can decide to share a piece of content online, but not broadcast it on-air, and contributors can be allowed to set diverging copyright settings, or levels of visibility. Adopting such a model should make it possible, for example, for content producers to request that their programme can be shown online but not broadcast on-air, or vice versa, and to keep uploaded content private for the time being or made public for a limited amount of time.


In addition, Dorf TV's ambition to establish channels for individual programme makers addresses their desire to develop a personal following, and helps move the archive to a more personalized web experience for audiences, in which they can more easily follow or subscribe to specific programmes or content creators. "We want to develop more ways of interaction, we want to make it possible that you can create something of your own on our website, not just upload a video. [...] That you can, in a way, have the feeling that you are broadcasting on Dorf TV, on our website," Otto said.

The way Radio Kultura approaches its programming hints at a similar culture shift, symbolized by the same 'upload first, broadcast later' model. Since all original content that is uploaded will be available online first, and integrated into a livestream later on without any particular set broadcasting schedule, contributions are not bound to conventional limits. "When our volunteers come to record a show, they don't have to respect a very strict timetable," Mikel Etxebarria explained; "sometimes their show can last 50 minutes, some other times one hour and twenty minutes, or two hours; as we put them first on podcast, we don't care how long they last." Moreover, presumably because their productions are available in the online archive first anyway, many programme makers seem unconcerned with questions about when their item will air on the stream. "We have a very new volunteer and she asked, 'can you put it in the live stream on Tuesday at that time, and on Thursday or Saturday' and we say, OK, no problem," Mikel recounted, "but most of the volunteers don't have any" preference.

The way programmes are supplied is flexible at Radio Kultura as well. While the station has a small second studio in Bayonne, for volunteers who live in the cities near the coast and can't make the 30-kilometer trip to Hasparren, some of its volunteers also simply produce their shows at home and send it digitally.

The Dorf TV model also brings its own set of challenges, however, not just in terms of reviewing the content they receive, but also in terms of recruiting content as well as volunteers. Dorf TV has employed an 'upload manager'. "She's responsible for interacting with those who want to upload, or maybe want to upload, and helps them in


HEUTE IM LOOP



Channel: Open Space

**dorf tv. - Das andere Fernsehen in OÖ**


Papier, Schere, Filzstift => 12fps + freesound.org  
Für dorf tv von Christoph Einfalt & Remo Rauscher



Channel: NGN.NeXt Generation News

**sausraus**

Im Rahmen der OTELO TRIFFT SCHULE und SCHULE TRIFFT OTELO Session haben 5 Kinder der NMS Vorchdorf an einem Video gearbeitet und v.a. das Schneiden und die Übergänge und Komposition im Bild erprobt. Unglaublich für sie war, dass nur wenige Sekunden in 2 Stunden Arbeit entstehen. Es geht um...



Channel: MKH-TV

**Kepler Salon Extra Extern #2: Haltbarkeit, die wir wollen?**

Der Kepler Salon zum zweiten Mal in Wels. Zu Gast: Stefan Schridde.  
Wer kennt das nicht? Konsumprodukte, die kurzlebig gebaut sind und vorzeitig kaputt gehen. Ist das vom Hersteller so gewollt? Hat der Kampf um die höchsten Gewinne tatsächlich dazu geführt, dass nur noch für die Mülltonne...

the uploading process,” Otto explained, but in addition, “for instance, if she finds a lot of videos on YouTube from a local producer, she gets in contact with this producer, saying ‘do you also want to show your video on Dorf TV?’, and then she communicates with these guys”. As a result, Dorf TV is starting to benefit from a cluster effect. “It’s not [just] an archive of what Dorf TV was showing, it has also become the largest regional and local allocation of content,” Otto said:

If you search on YouTube you find millions of videos and probably some of those videos are locally based, but if you search on Google about something that is happening in our city, probably you get a link to a video on Dorf TV, because [...] there are so many regionally and locally-based videos on our website [...] and so many producers with links to local communities. [...] We have seen a lot of examples where, for example, a cultural initiative or an artist who has his video on YouTube and on Dorf TV, on YouTube has 10-50 views and on Dorf TV 1,500 views, because Dorf TV is a local cluster of information [...]. We were astonished about that, that it's possible to create a local video platform that is [competitive with] YouTube.

### **One archive, more interfaces: towards an organizational separation of archived data and public interfaces?**

Julia Fallon, IPR & Policy Advisor at the Europeana Foundation, described at the Archivia 14 conference how Europeana is “moving away from being the portal [...] where you can go and search for digital, cultural heritage” to a more intermediary role. It does so not just by presenting themed channels of highlighted content, but also by “delivering metadata through our API” to creatives and developers, providing “end user services” which promote opportunities to access the Europeana metadata through Wikipedia, Facebook, Pinterest and other apps and services; and providing expertise and services to cultural heritage providers.

The Digital Repository of Ireland (DRI) is brainstorming along these lines as well. “We will have an API, so for example if the national library wants to store their data in the DRI, they could also have access to the API and they can build a national library app on top, where it's just national library content and it's visualized in whatever way they would prefer,” Rebecca Grant said. The DRI licenses all metadata under Creative Commons, meaning that “even if you're not the data owner, you will have access to this metadata by the API and if you want to do some kind of cool app or a mash-up using the metadata, you could do that”. To showcase what kind of attractive interface can be layered onto the repository in this way, the DRI launched “Inspiring Ireland” in 2014, a pilot, stand-alone website which takes content out of the overall repository via an API. The concept, Rebecca explained, is that you cannot just browse the collections, “there are interesting stories and visualizations,” and texts which link them all into overall

themes. “So the idea is that DRI is the trusted hub that hosts the content and Inspiring Ireland is what you can do with that content; once it's hosted in DRI, you can build a fantastic website with visualizations and extra text and tours.”

How is this relevant to community media? The Cultural Broadcasting Archive's Ingo Leindecker reflected on similar prospects for that site, considering how different the various user groups are which the archive aims to reach. It would be good to have separate portals, he suggested, “with the same database of content in the background, but one of which just [meets] the radio makers' or coordinators' need for rebroadcasting, then you would have a more community-based special interest access for listeners, and to bring programme makers closer to their listeners. And the next part would be to make it better accessible as an archive on the whole – to provide visualization tools or other search criteria, or whatever other interfaces to get the content out of the whole data set.”

In the panel discussion at the Capharnaum conference [Radio Archives in European Community Media](#) and in a [separate interview](#) on Radio Corax, Ralf Wendt hinted at similar possibilities. What if the process of archiving community media materials online, with professionally defined metadata, could be separated from the process of what can then all be done with those data and materials by individual stations, designers and communities, for different purposes and target groups? The concept of multifunctional archives, “this thought that an archive must do everything, I hold for fundamentally wrong”, he said in the interview, going as far as to say that “the old archives like the CBA, free-radios.net ... they will die”. Instead, he argued for “a divided idea of archiving”, where you have “a real, proper place where the data could lie, and they're well-prepared for everything,” but “the surface should be very different [and should be] divided into the different interests”. So on the one hand there is the archive as “a place and a way how to prepare the data – a container”, and on the other hand surfaces which access some that data which could be more holistic collections about specific topics in general, with not just audio, but also video, pictures, links, text or “interactive moments”.

Especially in the context of community media, however, such long-term visions raise a number of issues as well. Making fundamental decisions about how to design an archive structure, define metadata, and write descriptions without already having a clear concept of what the target groups and end use cases will be can be tricky in the best of cases. As this report illustrates, community broadcasters need or prefer a different width of scope, level of detail, and tone of voice in metadata fields than would be appropriate for e.g. research uses, and even within the community media sector, target groups and use cases addressed by the online archiving practices of different broadcasters can be very varied. Obviously, a lot would depend on who would be involved in which process.

The ways in which professional archivists are used to define metadata standards might not align with the immediate purposes of community radio stations. Moreover, some lines of promising funding opportunities, for example in the frameworks of media education, life-long learning, and digital skills, are focused especially on the volunteers and trainees of community broadcasters themselves taking on online work. But the challenge many stations already experience in motivating volunteer programme makers to upload their content would be compounded if the link is between the act of archiving and the concrete prospect of who gets to see the output and where becomes more intangible.

### **Prospects of a European community media archive**

In almost every interview we conducted, we raised the question whether there would be any interest in a European website where community media content from across the continent would be archived. Generally speaking, people liked the idea and expressed the sense that it might “no longer be enough to have just your own site, for your own radio station”; but not necessarily, it seemed, to the extent that they would work or pay to help make it happen. “It would be very interesting,” said Andreas Reimann of Radio Dreyeckland. “Should be useful. Difficult to say. [...] I think it would be very nice if there is a European media library or something, or a big database, with very advanced search tools - why not? In a lot of languages? Yeah.” The risk, he pointed out, would be that any such project might be structured in a top-down way, which would leave many stations reluctant to work with it “because they weren’t involved in the development”.

A number of other practical issues and obstacles were raised. Diverging copyright enforcement regimes between countries would add further complexity. Adding another level to uploading efforts, when stations and individual programme makers might already grapple with uploading and categorizing programmes on their own site, a national umbrella archive, and/or an external service of their choice, would further fragment content. Integrating RSS feeds would probably not be an alternative to uploading content, Chris Wohlwill thought: “you’d have to actually get into the APIs for all the systems around, and there are not just a lot of different ones but also each one is used differently.” More feasible might be a European website which would link to existing archives and highlight content of special value in news items. Beyond the potential of international programme exchanges, however, it would still presuppose the existence of a general interest audience for multilingual, Europe-wide content of sufficient size in a media sector rooted in local communities.

## Transcripts

“Although the internet is awash with visual and sound resources, searches have a heavy bias towards the written media,” David Knox wrote.<sup>7</sup> “At present, it’s (almost) impossible to search within an item of media, be that sound, photography or video. We then depend on text to describe it.” Search engines and end users alike rely on whatever info is provided in titles, descriptions, tags and categorizations to find back relevant media content, which otherwise remain ‘black boxes’ of content.

From the European Parliament’s website to the American news site C-SPAN, attempts are being made to automatically generate transcripts through automatic voice recognition software. The results tend to still be experimental, and not on the horizon of community media – but they may soon well be. A site like Wendefokus, for example, would benefit tremendously from the availability of transcripts; not just to cater to those who prefer to read rather than listen, but also in terms of making site content more search engine-friendly and making specific content easier to search for within the site.

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<sup>7</sup>David Knox, Writing Descriptions for Media: An Introduction, <http://livingarchives.eu/describing-media/>



## CHAPTER 6

### **Beyond the upload – Finding, knowing and expanding the online audience**

If a primary aim of sharing and archiving content online is to make it accessible to more people over a longer period of time, then the process of uploading and archiving broadcast content by itself – however consistently metadata are applied – is insufficient. Uploading content makes it exist online, but doesn't make it found online. It is a first step, which has to be coupled with efforts to make the content as easy to find as explore, and to reach out to potential users. As Michael Nicolai of Radio Corax put it:

There is this huge tera-tera-terabyte of stuff somewhere in the internet. Who gets access to that? Who will find it, and who's going through all that stuff, in the end? This is the next big question. It's not only about, 'it has to be on the internet because everyone is listening to our things on their iPhone or whatever', but [about] how they get to know that there is content for them.

If, as we wrote elsewhere in this report, the very concept of 'making radio' needs to be redefined to reflect the changing ways in which listeners engage with radio content, accessing it across various live and on-demand platforms, then what does this observation imply? Do programme makers need to come to see radio making as a process that doesn't just include uploading one's content as much as researching the programme and airing it live, as we wrote before, but sharing and interacting with it online as well?

In the previous chapter, this report called for deliberate reflection on what the prospective user groups of an online archive can be, what their needs and wishes might be, and how a station might prioritize them, and for tailoring those online sharing and archiving structures accordingly. To make archived online content known to potential visitors requires the same process of identifying your audience – and again raises the question how the audience for your online content might be a separate universe from your on-air audience.

"This was the discussion about this Wendefokus website," Michael Nicolai said, "because we had to think, for whom is this? Is it for pupils, so they can use it in school, in their historical lessons? Or is it for science? And what does that mean, how does a historical scientist go to such a website, what should he be interested in?" The site still

seems like an underappreciated resource. “We did a press release, combined with the [historical] anniversary, but this is one of the weak points of Radio Corax, we are not good with PR that way,” Michael admitted. “Because we don’t have a responsible person for that, we aren’t in a position to pay somebody for that, and then it becomes part of our every staff member’s work, and that never works that well.”

Yet failing to do sufficient outreach can condemn the content of an archive to obscurity. Not just does a station need, for example, “a weekly email going around, saying this is what’s up on the website,” as Near FM’s Paul Loughran suggested, it needs to know whom to send the email to, and how they use the archive, with which interests.

### **Web traffic statistics: do stations use them, and to what end?**

“One of the points of having our own infrastructure,” José María Casanova from CUAC FM wrote in response to our survey, “is having the capacity to gather data” about who listens to the station online. His station uses Google Analytics for measuring website traffic, and Icecast logs to analyse the streaming audience. “It helps us to know habits of our audience,” José wrote.

The availability of such data remains spotty for many broadcasters though. Future Radio in Norwich, the UK, can track the listenership of its live stream, but does “not have records of who listens to our online archive,” the same survey showed. At Red Nosotras en el Mundo it’s the other way round: they can see how often individual items in the Sound Library are accessed, but find it harder to measure the live stream’s audience. And Radio Orange, Jan Hestmann said, can see how often its app is downloaded, “but there’s no controlling for how they use the app”.

The availability and simplicity of statistics is one of the reasons why some people like using Soundcloud. Some programmes “have many listeners, many more than I’d thought,” Radio Stadtfilter’s Anna Tavernini recounted: “For example, we make live commentaries on all the football games of the team from the city, FC Winterthur, and there are always some interviews with trainers and players during the half time break, and we post that on Soundcloud - and that’s incredible. So many listeners! [...] Fans who went to see the game at the stadium and then they come home and want to listen to the interviews that were made during the game.”

There can be very specific reasons why the traffic data is needed, for example when a project received external funding and the station has to document its impact, or to track the effect of sharing links on different social media. Sometimes they can inspire small tweaks to how content is presented. Michael Liebler said, for example, “I would never



have thought that people are so very interested in playlists". When he noticed that they are the most downloaded webpages, he created a separate feature on the website to highlight them. But one point was reiterated by several community media practitioners we spoke with. "We use this data to measure our online audience but our goal is not [about] the number," one of José's colleagues at CUAC FM wrote. "Our goal is to give opportunities to groups who have no chances on other media." Radio Wüste Welle uses AWStats to track web traffic, but Chris Wohlwill said:

Let me put it like this: if I do something very new and very different [...] and it turns out that we have half the users now, I will think about whether that was a good idea. But I won't look at all the data before deciding to do anything. If there are some people in the team, or some people on the website team, or some people in the technical workshops, who think [something] is a good idea, then we will try it.

## **Interacting with your online audience: social media and other channels of communication**

A broader trend in how people navigate content on the internet towards aggregator- and social media-driven browsing makes it increasingly important for stations to use social media. After all, if fewer people navigate the web by going directly to specific sites and more people start to primarily see the web instead only as it gets filtered into their social media feeds, that also becomes the place to find and connect with an audience for your online content. Survey respondents from Future Radio and Dorf TV indicated that listeners more regularly interacted with those stations through their social media feeds and those of individual programmes than by calling in, leaving comments on the website, or emailing the station or programme makers. Community media are particularly well positioned for working with social media, Jan Hestmann argued: "You just have to push it a bit, so the people who are working around you get to know it, and when they know you exist, it just keep on running." Several other interviewees, however, expressed wariness about social media, indicating that they didn't use them for their community media work because they didn't like companies like Facebook and what they stand for. They even used identical language: "We don't want to give our content to Facebook." Daniela Garcia from Red Nosotras en el Mundo turned this argument around, however, describing the act of disseminating community productions as a form of "taking control of social media".

Social media use by community broadcasters seems largely limited to Facebook and Twitter, though Near FM and FS1 have Flickr accounts and several stations have (invariably inactive) Google+ accounts. Opinions about their use differ. "I think

Facebook is not interesting, but Twitter is important,” said Radio Dreyeckland’s Andreas Reimann. “We have several Twitter accounts [...]. I think the most important Twitter account is for our current affairs programme, not the one for the whole radio station.” But Radio Wüste Welle’s Chris Wohlwill said: “[We] don’t use Twitter anymore, because if you want to use Twitter you have to use it right, you can’t just post existing content, people aren’t interested in that. There must be a connection to the followers, and someone really has to get into that. [...] We use Facebook – our Facebook page is pretty active”.

Of the stations whose Facebook and Twitter feeds we checked in the summer of 2014, most updated them fairly regularly, but social media outreach was still fitful among some. A year later, many stations had stepped up their posting frequency. Radio LoRa, for example, went from posting only a handful of times in half a year on its Facebook page to posting every couple of days, and the Twitter accounts of Northern Visions and Freie-Radios.net went from not having posted in over half a year to posting multiple times daily. There was a corresponding increase in the reach of the social media accounts we looked at. However, the table below includes the “Talking about this” metric, sampled on a random day in 2015, as a reminder that having a high number of likes or followers does not automatically translate in a high level of interaction, which requires day-to-day cultivation.

	Facebook					Twitter		
	Likes	Growth	Talking about this	Type	Updated	Follows	Growth	Updated
<b>Tilos Rádió</b>	>31000	15%	185		Often	>1400	40%	Regularly
<b>Radio Študent</b>	>10000	25%	256		Often	>6500	40%	Often
<b>Red Nosotras</b>	>5500	5%	234		Often	>3000	30%	Often
<b>N’rn Visions</b>	>5000	10%	15		Occasionally	>2500	80%	Regularly
<b>Radio FRO</b>	>3500		15		Regularly	>700		Occasionally
<b>Radio Corax</b>	>3500	25%	64		Regularly	>1800	20%	Regularly
<b>Near FM</b>	>3000	30%	101		Regularly	>2000	60%	Often
<b>Near TV</b>	>300		0		Occasionally	>300		Regularly
<b>Radio Orange</b>	>3000	35%	115		Often	>500	95%	Occasionally
<b>Radio Kultura</b>	>1600			personal account	Often	>500		Regularly
<b>FS1</b>	>1600	20%	36		Regularly	>150	90%	Regularly
<b>Radio LoRa</b>	>1400	55%	7	page	Regularly	--		
	>300			group	Regularly			
<b>Dorf TV</b>	>1400	60%	13		Regularly	>500	25%	Rarely
<b>Salto</b>	>700	375%	8		Regularly	>400	235%	Regularly
<b>CBA</b>	>500		1		Rarely	--		
<b>Craol</b>	>400	40%	8		Occasionally	>1600	35%	Regularly
<b>Freie-Radios</b>						>600	50%	Often

“You need names and links and pictures or videos, text does not work,” Dorf TV’s Otto Tremetzberger responded in our survey, and Jan Hestmann agreed: pictures work well on Facebook, programme information does not. In addition to using images, asking simple and open questions to the audience, and tagging people, interviewees and organisations work best, Future Radio wrote.

The sites of about half the stations we looked at featured buttons promoting and linking to their social media channels, often discretely tucked away in the footer. ‘Like’, ‘tweet’ and ‘share’ buttons were also included on around half the sites we looked at. Those tend to be limited to Facebook, Twitter and Google+ options or provided in the form of web widgets like AddThis. Radio Dreyeckland does not have them, however; “these buttons are very dangerous, [in terms of] data protection,” Andreas Reimann argued. Radio Kultura’s Mikel Etxebarria emphasized design considerations: “When you see websites from other radio stations, sometimes there are [just] too many things”. Michael Liebler cited the fleetingness of social media as reason not to integrate buttons and plug-ins: “The problem is that users are very flighty. Today they’re on Facebook, tomorrow it will be something else.” His point is illustrated by the “share” feature of the inline player on the CBA, which includes options for Digg, Delicious and Technorati.

Social media accounts seem to sometimes be seen as a fun and useful extra, maintained by whoever happens to have office hours. This attitude was illustrated by remarks such as, “people who want to listen to something or know something, they just call us or they write an email.” But several stations take a more focused approach. At both Radio Študent and Radio Kultura, dedicated time is set apart for social media management. Among the three staff members at Radio Kultura, half a full-time post is dedicated to communication, Mikel said. “We all produce programmes, but [one colleague] devotes part of his time to [...] Facebook, Twitter, and the newsletter.”

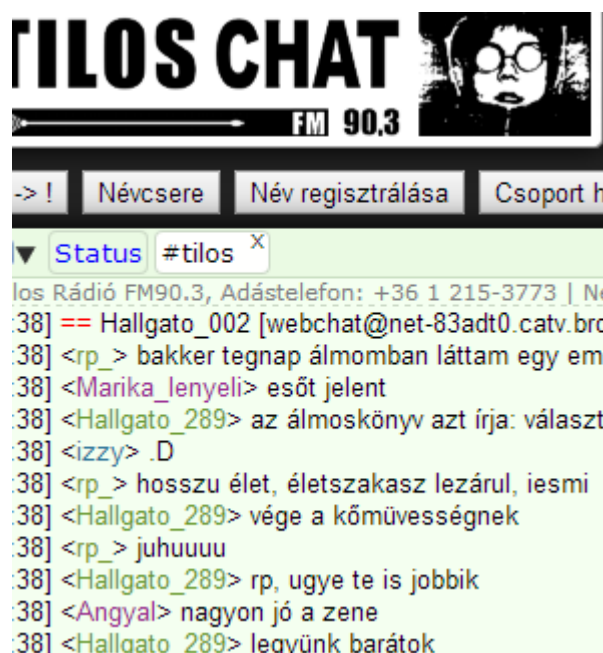
### **Newsletters, forums and comments sections**

Newsletters are a common tool to publicize newly uploaded content. At least seven of the stations we reviewed send out regular newsletters or e-bulletins of some kind. In addition, Radio Corax and Radio LoRa publish newspapers, published every few months, which can be read online as well.

About half the sites we looked at featured comments sections of some form, though most seemed to lead an ailing existence. On the Near TV site, the one comment that was listed in a “Recent comments” section at the time of reviewing was two years old. On the Radio LoRa site, every broadcast comes with a “give feedback” button, but a convoluted submission system in which commenters have to click an emailed

confirmation link for every comment they post doesn't encourage contributions. On the Freie-Radios site, however, the comments sections are sometimes used by logged-in member stations to note that they rebroadcast an item and whether they edited it first. And while comments are few on the Lokal site of Radio Corax in Halle, an occasional comment can serve as a reminder of how rewarding they can be. When the site uploaded an interview about the role a senior site engineer had played in the expansion of the town in the communist era, one of his former colleagues commented to express his appreciation and to recount how he'd gotten in touch with the engineer again after hearing the broadcast. On the Radio Connemara site, one user left the kind of heart-warming comment that keeps a community broadcaster going: "Can't wait to go back home to Connemara. Listen to you guys every night in bed. Helps me get to sleep. You're keeping me going until I can move back; thank you."

In the age of social media, however, comments sections may seem outdated or less relevant, and comments sections left unused might make a site seem less alive. This is even more true for user forums. In its previous iteration the Radio Študent website featured a discussion forum which logged almost 3,000 comments over the years, but was not carried over into the new design. Radio Corax still has a [CoraxForum](#), though only two new topics had been posted in the last half year at the time of review. If there are very few personal or practical comments, forums and comments sections might not be worth any effort that might be involved in moderating and filtering spam and monitoring posts for any questions that should be answered. Tilos Rádió, meanwhile, still runs an IRC chat, and Radio Corax has a chat room on its site as well. On a more contemporary note, we did not come across any community media site which experimented with crowdtaging to label archived content.



The degree to which broadcasters make it easy for listeners to get in touch varies greatly, from providing only an overall response form to including ways to leave feedback for programme makers on the pages of individual broadcasts. Contact info pages range from presenting only a general email address or phone number to providing email addresses for all staff members. Small changes in how this info is presented can make a real difference. Most of the feedback Radio Wüste Welle receives is through email, Chris Wohlwill said, but "when we relaunched the website,

and put buttons on the home page saying “message to the office” and “feedback to the website”, it - I don't know - quadrupled the number of contacts we had.” Such messages, as well as any inquiries through Facebook, are always responded to quickly, he added, “because everything that is online for two days is ... ages.”

How easy is it to get in touch?					
	Response form	General email address and/or phone number	Specific email addresses or phone numbers	Links for feedback to individual programmes or broadcasts	Additional features
CBA		X			
Corax Lokal		X			
Corax main	X	X	++		
Craol		X			“Helpline”
Dorf TV		X	+		
Freie-Radios		X	+		Supportsystem / bug tracker
FS1		X	++		
Radio Kultura	X	X			
LoRa		X	++	X	Skype
Near FM		X	++		
Near TV		X			
Northern Visions – ACL	X				
Northern Visions – GC, OG	X	X			
Radio Orange		X	++	X	
Radio Študent		X	++		
Red Nosotras		X			
Tilos Rádió		X	+		

Email forms can fulfil very specific functions. Radio Z broadcasts a programme called “Strafzeit” for people in prison and their friends and families. They use the email form to send the editorial staff greetings and messages for prisoners they want the programme to broadcast, Michael Liebler explained: “it's very important for these people”. In general, Michael Nicolai recounted, there's feedback every day, and sometimes critical responses as well: “They have high expectations, because they know our nature, our critical view on the world. And if we fail, they say [things like], if you're talking about refugee problems, why do you use terms like that in the news? They're really sensitive, our listeners, and this is really good, to have this.”

In the end, though, for all the importance of digital communication tools, Mikel Etxebarria proposed a reminder of the local nature of community media:

This part of the Basque country is very small [...] and the community that moves around culture, the Basque language – after working here 15, 16 years, you know each other. [...] So in the street also, [people will say] “I saw your new website” or “I have listened to this programme and I like it”, and that’s a very good way to have the feeling of the listeners.

## External sites and channels run by individual programmes

Even if the station has its own online archive, some volunteers will be uploading their shows as well, or instead, on external commercial sites or on their own websites or blogs. “Most of our evening shows, or a lot of the music shows, work like this,” Andreas Reimann said. “They have their own homepage and some of them upload their music shows there, but not to us, to the main homepage of Radio Dreyeckland”. The programme makers of at least five regular shows at Near FM upload their material to their own channels on Mixcloud or Soundcloud, and several Tilos Rádió DJs upload their programmes to those sites as well, [sometimes](#) gathering 500 [followers](#) each.

Moreover, the longer a broadcaster waits with building its own online structure for sharing and archiving content, or the less adequate those structures are, the more likely volunteers are to already be creating collections of their content on external platforms, and be reluctant to switch or duplicate their efforts. At Radio Corax, a lot of programme makers use other platforms, Michael Nicolai said. “The whole DJ scene, all the electronic [music], are Soundcloud makers, and the political things you find more in blog structures.” The scope of content there can be very impressive. “Our most active are the Vietnamese,” Rui Monteiro from Aarhus Global Media in Denmark said. “Their homepage is fantastic, it’s more fantastic than ours. They spend hours and hours making it. And that’s great for Vietnamese listeners, everything is in Vietnamese”.

Uploading to well-known, commercial platforms might just come more naturally to some volunteers, Radio Orange’s Jan Hestmann suggested. “I understand it to some extent. I mean on Soundcloud you are very limited actually, unless you pay – but it’s just established, and I think maybe young people on Facebook prefer clicking on a Soundcloud link than on a link to an archive you don’t know. [...] It looks nice, it’s known, so it’s working.”

If it is a given that some programme makers will prefer to upload their content to an external platform, is there a task for the broadcaster to manage their existence, if only by making it easier for its audience to find these content diasporas?

In practice, this is done mostly through a station's social media channels, by sharing or linking to content from blogs and channels of individual programmes. In theory, a station could link to such external content, or even integrate feeds from such blogs or channels, on its website, though especially stations with a high number and turnover of volunteers would have to update such content frequently. Michael Nicolai would still like to see a central place with such links and content, however. Right now, external websites of individual shows can be linked in programme descriptions, but at a station with hundreds of volunteers, it still often happens that somebody mentions a programme maker and says, "did you know that he has a great website, and he's always pointing out that he's from Radio Corax?", [...], and nobody knew". A central place on the website to present them "could be a Corax 'meeting-point', a point where everything comes together, whether it is information, on a link basis, or whatever. I think that would be nice, because that could show the Corax universe as it is, as self-developing in a way, and growing, and pulsing."

A potential sticking point, however, might be that copyright matters are not taken into account as strictly on many of these external channels as the stations themselves are forced to do, and that this is why some programme makers chose the external option in the first place. "I have heard" there are programme makers who upload their content to services like Soundcloud, a staff member at one of the stations said, adding that "I don't know anything about it of course, officially - we always say, you can put links in your part however you want, but we have never seen it."

Some stations have experimented with creating personalized spaces for individual programme makers or teams. Dorf TV created channels, and the Radio Z website features some subdomains for individual programmes, with their own design. "I'm very interested when people do something with their own pages," Michael Liebler said, "and if somebody comes to me and says, we want to have our own page, but I have no designer, I do it for them." At Radio Wüste Welle, Chris Wohlwill explained, programme makers "can either choose to have an internal blog, or to put in an RSS feed from your external blog, and then the last ten articles from your external blog will be shown on the Wüste Welle site under your show."

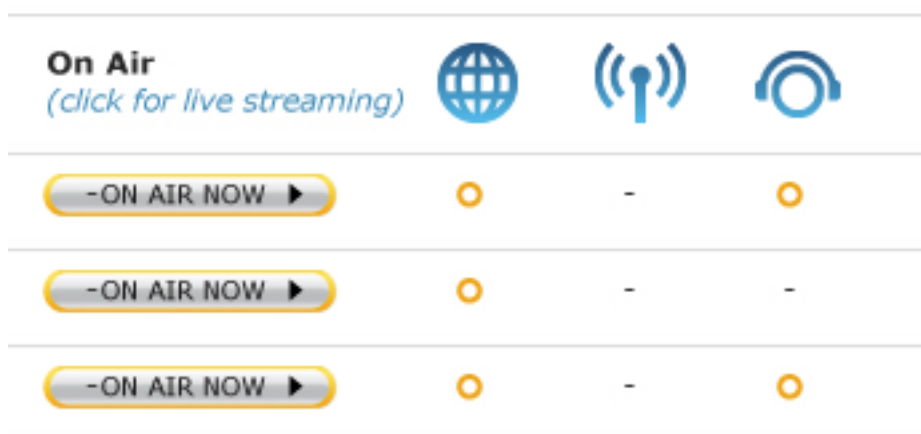
Since many regular programmes also run their own Facebook or Twitter accounts, stations improvise with similar diasporas of social media channels. At some broadcasters, like Salto and Dorf TV, we found social media channels of individual programmes or uploaders in 2014 that were more successful than the station's own



counterparts. Only occasionally do the formats for uploaded content or webpages about regular shows feature a separate field to link to programme-specific social media, however, which many content creators get around by pasting social media links into the description field. There are exceptions, nevertheless, of station websites which do integrate these links into their design. On the Radio LoRa site, every broadcast is accompanied with links to the programme's own site and social media channels, where they exist:



The Craol website includes a section on “[Radio stations](#)” which provides short information about a list of Irish community radio stations, with links to their websites, live feeds and social media pages, but the listing presents an example of how not to use icons; it would be difficult to guess that, from left to right, these icons refer to website, podcast page, and social media account.





## CHAPTER 7

### Showcases – Examples of online sharing and archiving structures

#### Radio Kultura

Radio Kultura is a bilingual, Basque/French-language web radio station which identifies as a “radio associative” and “radio libre,” and “offers Basques around the world the possibility of hearing Basque music, news in Euskera and French as well as providing free Basque classes online.”<sup>8</sup> The station attaches great value to cultural content that extends beyond the day-to-day news cycle and the creative freedom of its programme makers. There are “zero restrictions” on what programme makers present, Jérôme Brethes told *Sud Ouest* in April 2013.<sup>9</sup>

Radio Kultura is based in Hasparren, a small town of around 6,000 in the Pyrénées-Atlantiques region of France. The station does not carry advertisements. It derives some of its financing through customized productions, for example by recording events. The station’s website presents a good case study of how a large online archive of audio content, with many thousands of items, can be made attractive and easy to access to a heterogeneous audience, thanks to a visually appealing design and user-friendly, clearly structured navigation and filtering options. The “Émissions” (broadcasts) section of the website functions as de-facto archive, though the word “archive” is never used. It presents a listing of paginated, categorized content, and encompasses almost 5,000 items of variable length, going back to 2005 when the station was first established, which can be filtered by theme or browsed chronologically. Every audio item can be both streamed and downloaded as MP3 file. The items are presented as individual blocks on the page, marking each specific item more clearly than a purely text-based listing would. Every ‘box’ is colour coded by content category and comes with icons for playing the item, adding it to a playlist, downloading it and sharing it.

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<sup>8</sup>“Job opportunity: the online broadcaster Radiokultura is looking for a journalist to do radio coverage”, Euskalkultura, 9 May 2013, <http://www.euskalkultura.com/english/news/job-opportunity-the-online-broadcaster-radiokultura-is-looking-for-a-journalist-to-do-radio-coverage?p=66>

<sup>9</sup> Pierre Penin, “Pays basque : Radio Kultura diffuse ses bonnes ondes sur le net”, *Sud Ouest*, 2 April 2013, <http://www.sudouest.fr/2013/04/02/radio-kultura-diffuse-ses-bonnes-ondes-sur-le-net-1012182-706.php>

What is striking about the site's Émissions section, when compared with many online archives built by traditional community broadcasters, is how its design and structure are tailored to the preferences of an online audience. The pictorial lay-out of the pages, with easy-to-click tiles, seems optimized for mobile use. The colour coding of content and intuitive icons help create clarity without using much text. Much of the audio content is edited to be specific in subject matter and limited in length, which should benefit online sharing. Every item in the Émissions section includes audio, as opposed to broadcast archives on other stations which mix items with audio and items with only text information. Instead of reproducing the logic and structures of on-air broadcasting, with content being broken into separate pages and sections by date, radio programme and/or DJ/host, content is as much as possible brought together in one place, benefiting from a dynamic structure where further information unfolds within the page. It can only be filtered by category or theme and tag.

**KULTURAJA.EUS**

**Emankizunak / Émissions**

**Emankizun guztiak / Toutes les émissions**

**ERREPORTAIA / REPORTAGES**  
 EUSKARA IRAUPENA / DURÉE : DATA / DATE : 28/04/15  
 06:03  
 Kansas estatuko planista euskalduna ... Ronnie Lynn Patterson

**ERREPORTAIA / REPORTAGES**  
 FRANÇAIS IRAUPENA / DURÉE : DATA / DATE : 28/04/15  
 08:39  
 Emmenons notre confort aux autres ...

**ERREPORTAIA / REPORTAGES**  
 FRANÇAIS IRAUPENA / DURÉE : DATA / DATE : 28/04/15  
 04:02  
 Le lien entre le Kansas, Rachmaninov et la langue basque ... Ronnie Lynn Patterson

**MUSIKA / MUSIQUE**  
 EUSKARA IRAUPENA / DURÉE : DATA / DATE : 28/04/15  
 11:26  
 Hirugarren dimentsiorat Mursegorekin ...

**MUSIKA / MUSIQUE**  
 IRAUPENA / DURÉE : DATA / DATE : 28/04/15  
 52:13  
 Noise R Us ngo Off ...

**MUSIKA / MUSIQUE**  
 IRAUPENA / DURÉE : DATA / DATE : 28/04/15  
 50:44  
 o (for radio) #6g\_TRI#1 (Julien Pontvianne)

**SORKUNTZA / CRÉATIONS**  
 EUSKARA IRAUPENA / DURÉE : DATA / DATE : 27/04/15  
 58:40

**EMANKIZUN GUZTIAK / TOUTES LES ÉMISSIONS**

**SORKUNTZA / CRÉATIONS**

**MUSIKA / MUSIQUE**

**MINTZALDIA / CONFÉRENCE**

**ERREPORTAIA / REPORTAGES**

**BILATU EMANKIZUNETAN / RECHERCHER DANS LES ÉMISSIONS**

Hitz gakoien bidez / Mots clés

Gaika / Thématique

Toutes

**BILATU / RECHERCHER**

Berritu / Reinitialiser

This choice benefits the site's minimalist clarity and ease of use, compared with many sites that have organically mushroomed into somewhat byzantine constructions. It helps the Émissions section to function as an autonomous audio archive for prospective

online listeners to search and explore by theme and topic. On the other hand, it prevents a greater versatility in terms of use cases.

Those who listen to the station's livestream and want to quickly look up archived content from their favourite show, or find more information about what they have been listening to, might find their options limited. Archived broadcasts cannot be browsed or searched by date. Neither is it possible to search for content by programme, host or a combination of both. With [few exceptions](#), item descriptions do not provide full playlists or longer descriptions. This must be a function of the site design as well: the system in which more info “unfolds” when clicking on an item’s box means all info can be accessed from within the Émissions page, without clicking through to separate pages by show or broadcast, but also means longer descriptions would make the page unwieldy. Instead, when a show has its own external site or blog, more [detailed info](#) and [playlists](#) are sometimes presented there.

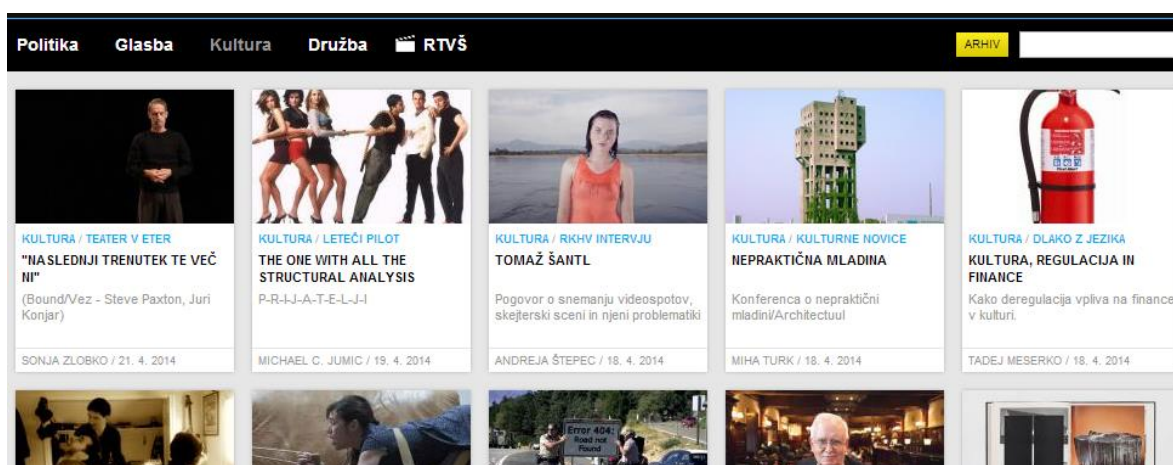
The website offers few or no ways for visitors to respond to content or reach out to programme makers -- though the station's very actively maintained social media feeds and newsletter could make up for this. The absence of an About Us page, news items, or information about projects or events likewise helps simplify the site structure and avoid clutter, but makes it more difficult for new visitors to get a grasp on the station's identity and activities. The fact that much of the programming being live streamed is not archived and some of the content in the archive is not streamed might create some confusion as well.

There are also some minor issues that could still be tackled - the parallel use of themes and tags, for example, could be made more transparent; it would be useful to be able to select more than one theme at a time in an archive search; and the cumulative 'layering' of search and filter options could be signposted better. A more clearly elaborated and more extensive advanced search menu might help. Information about the content's copyright status is sparse.

The station's practice of uploading programmes to the archive before they are broadcast might be an interesting model for stations struggling with motivating volunteer programme makers to engage with the uploading process once they've already broadcast their show on-air. In the case of Radio Kultura this doesn't seem to have been a factor though, since the station's staff does most of the uploading, which will have helped create an evident consistency in how descriptions and tags are added.

## Radio Študent

Radio Študent is a non-commercial, alternative, urban radio station in Ljubljana, Slovenia. It was founded in 1969 by the Student Organisation of the University of Ljubljana and broadcasts on-line as well since 1998. The station broadcasts some 45 hours of music, arts and culture programming and some 25 hours of social, political and educational programming every week<sup>10</sup>. While the station has five full-time employees, over 200 people take part in creating the programmes. The station promotes tolerance, social critique, freedom of speech and cultural diversity, and its music programming focuses on “edgy, marginalised and socially provocative music from [around] the world” [quote from same link]. It organizes music festivals and has its own record label. Instead of featuring a separate archive section, the Radio Študent website as a whole consists near-exclusively of an archive of information about individual past broadcasts, sometimes accompanied by streaming and downloadable audio. These can be accessed separately by theme (politics, music, culture or society) or show by browsing between the site’s sections and pages. The word “archive” itself is never used, other than as reference to the station’s defunct but preserved former website with content from 2012 and before (which doesn’t, however, feature much audio content). This way, the archived content itself is placed at the centre of the site. The main content of the site’s front page consists almost entirely of a mobile-friendly, image-centric, tile-based presentation of recent broadcasts in reverse chronology, with only a larger tile near the top highlighting an “editors’ choice” of selected programmes. The navigational menus by theme or show function in the same way. Rather than starting off with much in the way of separate, static information, which is limited to a small text box at the top left, they simply present filtered results from the archive.



<sup>10</sup> Culture.si, Radio Študent (RŠ), [http://www.culture.si/en/Radio\\_%C5%A0tudent\\_\(R%C5%A0\)](http://www.culture.si/en/Radio_%C5%A0tudent_(R%C5%A0))

The Radio Študent website provides little further content beyond the archived info about past shows; most notably, there are no news items or separate pages on individual projects or activities. Perhaps as a result of this choice, however, there is a diaspora of separate websites and subsites on, for example, its [record label](#), [its marketing](#), the [festivals](#) it [organizes](#) and Radio Študent-[related initiatives](#).

Not all programmes that are aired appear to be added to the archive, and only a selection of the broadcasts that are archived includes audio files/streams. At the time of our website review (in 2014) none of the most recent ten archived programmes on the “Music” page included streaming audio, and only five of the last ten archived broadcasts in the Politics section, five of the last ten in the Culture section, and eight out of the last ten in the Society section included audio. On such overview listings by category it is not indicated whether an item features audio or not.

Archived information about past broadcasts seems to generally go back to late 2011/early 2012, in line with the overhaul of the website in 2012, though information about older broadcasts is available for some programmes. Archived broadcasts cannot be browsed or searched by date. Content listings expand automatically through infinite scrolling instead of being paginated, which is a user-friendly solution for browsing recent content but makes it more difficult to jump to older content. Names of programme makers, however, link through to filtered listings of all their content.

Individual archived broadcasts in the politics, culture and society sections of the site are sometimes, but not always, tagged with “topical-political” keywords. Broadcasts are also sometimes tagged or categorized by a choice of several other fields, such as “Avtorji” (which does not refer to the programme maker or host but to relevant people covered in the broadcast), “Kraj dogajanja” (venue/location), and “Institucije” (organizations, groups or institutions covered or represented in the broadcast). A broadcast might well [not include any of](#) these tags or categorizations, however. Whereas all these categorizations allow users to jump from one broadcast to related ones, the site does not seem to provide an overall taglist / tagcloud, search-by-tag function or advanced search menu options that would make these categorizations a more accessible way to find content.

The length and type of descriptions that are provided about individual broadcasts in the archive vary greatly, but there is always something, whether [a playlist](#) (sometimes [accompanied by a YouTube video](#) for one of the songs), a [full article](#) or [lengthy description](#), a [transcript](#), or a [short description](#) – sometimes [very short](#). The descriptions for the broadcasts of a [daily show about what’s going on in Ljubljana](#) read like an agenda of cultural events of the day. When looking at any one specific broadcast in the

archive, there is no way to click through to the next or previous item, the user has to go back to the respective archive listing.

The experience of using and interacting with the station and its archived content benefits, however, from effective graphic design, attention to detail, and the station's vibrant social media channels, with over 10,000 likes on Facebook and over 6,500 Twitter followers.

A separate "RTVŠ" section on the Radio Študent website presents video material, ranging from short clips from station's [Tresk festival](#) or musicians playing [in the Radio Študent studio](#) to 100-minute recordings of [radio shows](#) or local [Student Union meetings](#) about Radio Študent. All of these videos are hosted on Vimeo, and embedded in the Radio Študent site.

## Tilos Rádió

[Tilos Rádió](#) is Hungary's first and most important non-profit, community radio broadcaster. Its programming consists of a mix of music and talk shows, with a focus on independent culture, socially conscious content, and cultural diversity. Since its launch in 1991 as a pirate radio station, Tilos Rádió has played a significant role in Budapest's civic life through cultural events and parties as well as broadcasting. It carries no commercial advertising and relies to a large extent on donations by listeners.

The Tilos.hu website includes both a live stream of the station's radio programming and an archive of past programming. Smartphone users can use the Tilos Rádió apps for [Android](#) and [Windows Phone](#). While the site's archive listings go all the way back to January 1993, the playlist files for the older shows don't work anymore. The cut-off date for how long shows can still be streamed appeared to be four years at the time of our review.

Archived content can be accessed in two different ways. Using the "Műsorok" ("Shows") section of the site provides access to programming by show. This section's homepage presents a list of all Tilos Rádió's shows, divided between talk shows and music shows, with a short description for each show. Each show's page has a (usually very short) description, info about its broadcast times, links to the pages of individual hosts/DJs, and an RSS feed, as well as, sometimes, links to the Facebook page of the show or an external link. Recent broadcasts are listed and can be streamed from this page.

Using the "Archív" section of the website provides access to programming by date, with a calendar icon and "previous day" and "next day" links facilitating navigation. Clicking

on the link for any show leads the visitor to the general page for that show, not the page for the individual broadcast of that day, but the broadcast can be streamed already from within the “Archív” page.

On the pages by show, the user can click on any of the recent broadcasts for more information, but there usually is none. There are only occasional exceptions where a playlist or more info is given. Some such exceptions are highlighted on the Tilos Rádió website’s front page under “Legfrissebb adásnaplók,” or previewed under “Műsorajánló”. Once the user has clicked to see more info about an individual broadcast, it is not possible to navigate directly from one broadcast to the next or previous, only by first going back to the show’s homepage.

The archive does not use tags or any other additional categorizations. A site-wide search functionality was implemented in the past year and a half.

In addition to the general archive (accessible by data and by show), the Tilos Rádió website offers several other sections with archived audiovisual content. An extensive audio library (“Hangtar”) presents long lists of audio files, mostly of past Tilos DJ mixes and concerts. A “Legendarium” page highlights six historical radio shows from the 1990s and links through to MP3 files of individual broadcasts for each show. The Writings (“Írások”) subsection in the Chronicle section of the site, which presents interviews from the past ten years with music artists, features transcripts and at the time of the website review still included links to audio or video files as well, though many no longer worked since they had been hosted on MySpace. While these different website sections combine to offer a variety of archived content, the lack of intuitive distinctions and clear signposting might leave casual users looking for past audio content unable to recognize what can be found where.

The station’s 30,000 Facebook likes, complemented with a range of Facebook pages for individual shows, testify to its local popularity and community roots.



## APPENDIX

### Methodology

#### What material we collected

The study is based primarily on a combination of case study website reviews and in-depth interviews. Additional material was based on presentations at conferences and workshops, input from conference/workshop participants, sampled responses to an online survey, relevant web statistics, and a review of the websites of all the Bundesverband Freier Radios (BFR) member stations.

The researchers conducted interviews with people who have been directly involved with planning or building online archives, and with community media staff and volunteers who work with them on a day-to-day basis as producers, editors or administrators. These interviews played a key part in centring a significant part of the research on processes as well as products, tackling questions such as: How have successful models of sharing and archiving content online been developed? How are these online archives structured and organized? How is the work flow structured and who plays what role? What training, guidance, and moderation are needed and established? What technical capacities and other related issues do stations grapple with? What are the challenges in these respects, what practical solutions are being found, and what problems are not being adequately solved?

The case study website reviews served to map what scope of content stations were currently sharing online, and to review issues of structure, design, navigation and interactivity from a user perspective. An additional review of the websites of all Bundesverband Freier Radios (BFR) member stations was intended to acquire more of a quantitative sense of what stations are currently publishing and sharing online, by taking one country (Germany) as example. Preliminary findings from this review were summarized in an article for the project website, "[\*Community radio broadcasters in Germany and online archiving: Are we there yet?\*](#)"

Germany was chosen for this country review because the country's community radio organizations are organized in a national umbrella organisation, the BFR, and an online programme exchange platform facilitated by the BFR, the Freie-Radios.net site, might present an added incentive – and tool – for stations to upload their broadcasts. The country was therefore expected to present some relatively promising examples. At the



same time, Germany does not have the sheer range and numbers of community media as the United Kingdom, and might therefore be more comparable to other European countries.

## What kind of archives, stations, and websites we covered

The research was limited to the websites and online archives of community broadcasters. We mostly refrained from branching out to reviewing archiving efforts in related fields, though there is certainly a wealth of interesting practices to be considered that might be valuable to community media as well.

Community media practitioners pointed us to a number of examples they had found interesting and useful from public service media, community organizations, and thematically focused online initiatives. They ranged from national audiovisual archives like the [Netherlands Institute for Sound Vision](#), archives run by public broadcasters like [PBS](#) and the BBC, and university-based research archives like the Danish [LARM Audio Research Archive](#), to neighbourhood community archives like the Finnish [Kallio Archive](#) and specialist or personal archives like the [Xeno-Canto](#) archive of bird sounds or the online archive devoted to the late DJ [John Peel](#). But in this research we wanted to prioritize reviewing the existing status and practices of online archiving and sharing by community media, and lift best practices from examples that were created, and became successful, within the specific context of community media.

The study does not constitute a comprehensive review of all community media archiving in Europe, as such a scope would extend beyond the available resources within this project. Instead, we sampled selected cases in order to present an instructive set of illustrations of current practices and suggestions of best practices.

To identify such examples, we queried the CMDS's long-established and extensive network of community media contacts and those of the project partners in Ireland, Germany and Austria; asked interviewees for further relevant examples; took samples from member listings of national community media federations and other listings of community media stations; and inquired for examples of best practice during our project-related participation in five community media-focused conferences.

*Disclaimer: descriptions in this report of website and archive structures, features and design, as well as organizational practices, generally reflect the state of development at the time the website reviews and interviews were conducted, between April 2014 and August 2015. Some of these may have further developed since then.*

## Context-adjusted definition of what constitutes archiving

We adapted our definition of online sharing and archiving to the realities of community media, characterized by limited financial and human resources and volunteer-created structures. The primary objective of most stations in uploading programmes (or parts thereof) online is to share current content with an expanded audience in convenient ways, rather than to build a systematized archive for posterity, which is valued but in practice mostly considered a secondary purpose. But the actions you take to share your programming (on your website and through podcasts, programme exchanges or even Vimeo or Soundcloud) are, to some extent, archiving steps: uploading, describing, categorizing, and making content searchable.

Diarmuid McIntyre formulated this idea in the context of Craol's programme exchange service: "each of the fields you select for the programme are fields in a database, which [...] then make it searchable. So the very act of uploading and choosing each of the drop-down menus meant that the content, credits, programme type, format, duration, the broadcaster, a lot of that key information is collected in the act of uploading. So what looks like a sharing mechanism is in fact [also] an archive."

For that reason, if audiovisual content was being uploaded and shared online; described to some extent and/or categorized in one way or other (whether by theme, subject, programme, genre and/or host and/or through tagging), we were ready to take the example under consideration. We did so in a realization, shared with some of the interviewees, that this was a flexible approach to the concept of archiving. As Paul Loughran of Near FM said: "when you say archiving, you mean just what we do at the moment - I guess technically it's not really archiving as such ... If you'd bring an archivist in, he'd say "that's not archiving", that's a kind of storing with a little bit of information."

## Interviews

We conducted a series of in-depth interviews, using a semi-structured approach. After developing a standard format questionnaire to use as basis for all interviews, we adjusted this format ahead of each interview to take into account the specific contexts of the broadcaster or organization in question. The interviews were mostly conducted in person, partly while attending conferences and workshops and partly during several fact-finding trips. A small minority of the interviews were conducted via Skype. They ranged in length from half an hour to two hours.

Questions focused primarily on context and process, though the nature and selection of archived content was queried as well. Among other things we asked what the community broadcasters saw as the main and secondary purposes and target groups of their archived online content, how their online sharing and archiving practices had come about and developed over time, what (if any) selection of content took place in which content was uploaded and what that selection was based on, what level of detail in description and categorization was made possible or required, what tools and services were used, and how they tackled data security and capacity issues. The largest individual thematic focus of the questions, however, was on the organization and management of the station's online sharing and archiving practices, e.g. whether the tasks of uploading and categorizing content were undertaken by volunteer programme makers themselves, staff, or technicians, or what division of tasks was involved, whether any review processes were in place, how programme makers were encouraged to participate in the process, and what training and information was provided.

### Full interviews

- Broadcasting Authority of Ireland (BAI): Elizabeth Farrelly and Anne O'Brien
- CRAOL, Ireland: Diarmuid McIntyre
- Cultural Broadcasting Archive (CBA), Austria: Ingo Leindecker and Thomas Diesenreiter
- Digital Repository of Ireland (DRI): Rebecca Grant
- Dorf TV, Austria: Otto Tremetzberger
- Near FM / Near Media Coop, Ireland: Paul Loughran and David Knox
- Radio Orange, Austria: Jan Hestmann
- Radio LoRa, Switzerland: Songül Çiftçi and Sami Sabaana.
- Radio Corax, Germany: Michael Nicolai and Helen Hahmann
- Radio Dreyeckland, Germany: Andreas Reimann
- Radio Wüste Welle, Germany: Chris Wohlwill
- Radio Z, Germany: Michael Liebler
- Radio Kultura, France: Mikel Etxebarria
- Red Nosotras, Spain / Argentina / El Salvador: Lucia R. Oliveras, Daniela Garcia, Pamela Palenciano and Xiana Sotelo

In addition to these interviews, Joost van Beek hosted a small discussion session at the Civil Media UnConference for Community Media & Civil Society in Salzburg in May 2014, with the title "Open discussion: Making your programs available online: tell us about your experiences with archiving!". Participants included Ingo Leindecker (CBA, Austria), Franziska Monnerat (Kanal K, Switzerland), Rui Monteiro (Aarhus Global Media, Denmark), and Anna Tavernini (Radio Stadtfilter, Switzerland).

We also benefited from shorter conversations about the research topic with a range of people, including Miriam Meda (AMARC Europe), Nadia Bellardi (Radio LoRa), Sibyl Moser (Radio Orange), Tamar Millen (Community Media Association) and many others.

## Website reviews

The desk research archive/website reviews we conducted were primarily descriptive, rather than evaluative in nature. While we used them to remark on particular elements that work well or not so well, their primary purpose was to describe what is being provided to website visitors. In order to do so effectively, each review was conducted using the same list of some 55 questions and indicators, to ensure that comparable information was gathered about each case.

Those questions and indicators were drafted to encompass a wide scope of online content. The core questions concerned the contents, structure and level of detail of the archival structures: e.g. what kind of content is uploaded and archived, for what duration, in what format, with how much description, sortable and/or searchable in what ways (by theme, show, date, host, and/or tags), updated how often. But a broader scale of inquiry also inquired the presence and functioning of a live stream, the presence and character of any audiovisual material on the website outside the archive, and how content was licensed, as well as a strong emphasis on the user experience in terms of navigation, design and usability – and some of those questions concerned site content as a whole rather than only the section of archived content. For example, they also included questions such as how prominently the archived content was featured on the site, whether site design was supportive of the content, how frequent dead links and other errors were, whether the type of language being used matched the archived content's target group, and whether information about the station, website or archived content was available in other languages. Specific emphasis was placed on interactivity, i.e. the degree to which listeners who access archived content can easily reach and interact with the station and programme hosts and share content.

### Full website/archive reviews

- CRAOL, the Community Radio Forum of Ireland
- Cultural Broadcasting Archive, Austria
- Dorf TV, Austria
- Freie-Radios.net, Germany
- FS1, Austria
- Near FM, Ireland
- Northern Visions, United Kingdom

- Red Nosotras en el Mundo, Spain / Argentina / El Salvador
- Radio Corax, Germany
- Radio Kultura, France
- Radio LoRa, Switzerland
- Radio Orange, Austria
- Radio Študent, Slovenia
- Radio Tilos, Hungary
- Salto, the Netherlands
- Wendefokus, Germany

In addition, we conducted shorter summary reviews of an additional number of stations in Ireland (3), Spain (5) and Germany (6).

## Other sources

In addition to the interviews and conversations mentioned above, we derived further information from presentations and workshops at the three conferences that were held within the framework of the Captcha project - [What Is Worth Archiving?](#) (Dublin, Ireland), [Archivia 14: Online Archives for Cultural Diversity in Europe](#) (Linz, Austria), and [Radio Archives in European Community Media](#) (Halle, Germany) – as well as the [Zukunftswerkstatt Community Media 2014](#), organized by the Bundesverband Freier Radios (BFR).

Moreover, several community media practitioners provided feedback on this study's subject through an online survey form, including people involved with Freies Sender Kombinat (FSK), Germany; Future Radio, United Kingdom; and CUAC FM, Spain.

## About the Center for Media, Data and Society



The Center for Media, Data and Society (CMDs) is a research center for the study of media, communication, and information policy in Europe. Founded in 2004 as the Center for Media and Communication Studies, CMDs is part of Central European University's School of Public Policy and serves as a focal point for an international network of acclaimed scholars, research institutions and activists.

CMDs produces scholarly and practice-oriented research addressing academic, policy and civil society needs; coordinates course offerings at CEU; provides trainings and consultancies; and organizes scholarly exchanges through workshops, lectures and conferences on current developments in the field.

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