

# Pilot MRE campaign in Cambodia using Billy Goat Radio System

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## Abstract

After the first evaluation of Billy Goat Radio System, which took place in October 2013 in the Sahrawi refugee camps settled in Algeria, in October 2014 Snail Aid carried out another in-field test in the north west of Cambodia. Aim of the mission was to finalise the research work started in January 2013 by implementing an actual pilot campaign held during an in-field mission aimed at evaluating all the main aspects of the tool. The combined use of tradition and technology is a constant characteristic in Billy Goat Radio Project: on one side, the traditional story telling proposed in form of a radio broadcast serial drama, and on the other side an adaptability system which uses in parallel a simple software and a system of cards to adapt the serial drama's story and the mine risk educational messages embedded in it to any context. Both the broadcasting and the adaptability system have been tested first with experts from different local and international organizations working on mine action in Cambodia and later on among several mine affected communities; results and feedbacks have been used to tune Billy Goat Radio system toward its final version.

## Introduction

Billy Goat radio is a Mine Risk Education tool, developed by Snail Aid – Technology for Development, in the frame of TIRAMISU<sup>2</sup>, an EU co-funded integrated project. It consists of a modular and adaptable system aimed at enabling local end-users to write and produce educational short serial dramas, whose episodes should be broadcast by radio and live performed inside mine affected communities.

In September-October 2013 Snail Aid took the preliminary version of Billy Goat Radio to the refugee camps of Sahrawi people settled in the south west of Algeria. This version had been conceptualized and implemented since January 2013 and already included the main basic features of the project, built on the basis of entertainment-education theories:

1. an educational serial drama in six episodes, to be both broadcast by a local radio and performed live by teams of actors travelling among mine affected communities,
2. a simple and cost-efficient recording equipment (suitable to itinerant plays) to record the episodes.

The third fundamental characteristic of Billy Goat Radio project is the possibility to use the tool in very different situations and contexts without the need of a long and expensive re-writing process and without needing professional writers: this possibility is achievable through the Adaptability System. Still missing during the first implementation in Algeria, this system had been anyway already considered and foreseen, and the experience made there with local mine affected communities, gave Snail Aid researchers the instruments to create the

3. Billy Goat Adaptability System, which, in its original form, consisted of a simple system of cards.

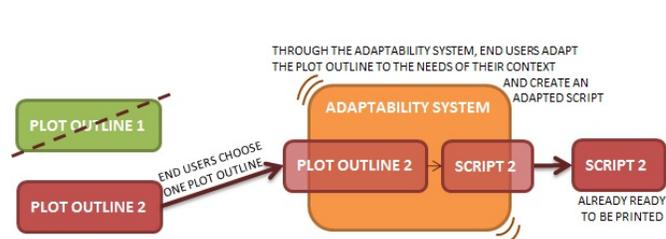


Figure 1 - the writing process: from plot outline to script

These three main points have been elaborated and integrated during 2014 by Snail Aid researchers, and a new, more complete version of Billy Goat Radio was taken to Cambodia in order to test its potential and its drawbacks. The precious collaboration and exchanges with experts from different local and international organizations working on mine action and later on the experiences among several mine affected communities lead Billy Goat Radio toward the actual and final version.

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<sup>2</sup> Toolbox Implementation for Removal of Antipersonnel Mines, Submunitions and UXO (TIRAMISU), is an EU co-funded integrated project (under grant agreement n. 284747) whose purpose is the creation of a comprehensive toolbox for humanitarian demining ([TIRAMISU.http://www.fp7-tiramisu.eu/](http://www.fp7-tiramisu.eu/)).

In October 2014, Billy Goat Radio project already included two different educational serial dramas, both organised in six episodes, whose different stories and characters make each of them more suitable for one or another context. For each drama, Snail Aid proposes a *plot outline*, which is basically the storyline of the drama without any local characterisation in terms of social life, environment, mine or UXO threat. The local end –users should choose one of the two *plot outlines*, then adapt it to their context’s needs through the Adaptability System: this way they generate their local version of the chosen drama, automatically creating a *script* which is the final step of their writing work.

The first serial drama, “Billy Goat: the story of Mariam and Yahdi”, was tested in Algeria, while the second one, “Billy Goat: life of Mliss”, was the one Snail Aid brought to Cambodia.

### Billy Goat Radio in Cambodia – Phnom Penh

Billy Goat landed in Cambodia well prepared: a complete serial drama already translated from English to Khmer, well established contacts with local and international organizations operating in the country and a team of local experts made kindly available to Snail Aid staff by the Cambodian Mine Action Centre (CMAC) for the entire duration of the mission, which took place mainly in the Pailin region, in the north west of the country.

Before starting with the recording and the broadcasting of the drama and moving all the staff to Pailin, the tool passed through a careful and accurate evaluation in the capital city, Phnom Penh. In two different occasions, the whole project was presented in front of delegates from organizations active in mine action in Cambodia: the Cambodian Mine Action and Victim Assistance Authority (CMAA), CMAC, the Cambodian Self Help Demining (CSHD), UNICEF and HALO Trust. After an explanation of Billy Goat Radio’s aim and functioning, the focus of these meetings shifted on the testing of the Adaptability System, at that time still consisting only of a system of cards. The system is made up of two separate parts: the first one regards the social aspects of the everyday life of the context where the MRE campaign takes place (from social, religious, gender discrimination, moral and traditions points of view). The second one is aimed at defining which MRE educational messages, among the several proposed by the system, actually fit to the real needs of the local affected communities in terms of threat (presence of mines, UXO, category of victims) combined with local features such as orography, environment, vegetation, etc.



Figure 2 - Test of Billy Goat Adaptability System in CMAA offices, Phnom Penh



Figure 3 - the Adaptability System cards in use



Figure 4 - Delegates of CMAA, CMAC, CSHD, UNICEF and HALO Trust in CMAA offices

Experts from organizations were asked to collaborate creating a new version of the story starting from the fixed *plot outline* Snail Aid prepared. Using the cards and answering a series of simple questions regarding everyday life inside mine affected communities in north-western Cambodia and the different threats, they gradually built around the *plot outline* a series of slight changes and different details which should be able to make this version of the serial drama (we call it “*version B*”) very adherent to the needs of the local context.

The same operation, after extensive research, had been previously carried out by Snail Aid staff who created a *version A* of the drama, whose script was used as official script of the serial drama for the MRE campaign in Pailin. The comparison of versions *A* and *B* should stress differences and consistencies between them, in order to check if the Adaptability System was effectively able to guide resident operators (without any experience in literary creative work) in generating a story version which could seem written directly in the local context by local writers. As a result, it was noticed that the Adaptability System part regarding the social features of the story was quite easy to understand and to use for the end-users, who seemed to be amused by the intuitive practice of the cards system. The part about the educational messages, instead, was difficult to understand and not clear in terms of results: among the several available educational messages, some were judged by the local experts as too general or vague, while others,

in reverse, were perceived as too specific. However, at the end, version *A* and *B* diverged only by few details, and Snail Aid and the local experts chose the same educational messages, unless few exceptions. The main drawbacks of the system were thus seen by the local experts as relying more in the difficulty of the use than in the proposed messages.

Similarly, a difficulty in the use was evident when Snail Aid researchers tried to explain how to proceed from the story version created through the Adaptability System to the effective writing of the final text in form of a script (organized as a series of dialogues, without descriptive parts). Not yet fully developed, this step of the system was still very complicated and confused, virtually impossible to be comprehended by non-specialists in one afternoon. Feedbacks and comments of the delegates helped a lot in enhancing and above all in simplifying this transition.

### **Billy Goat Radio in Cambodia – Pailin**

Pailin region is one of the most heavily mined areas in the world and among the five most mine affected provinces in Cambodia [CMAA, 2014]<sup>1</sup>. Despite a positive trend recorded in the latest years, in the first half of 2014 the number of accidents of mines and ERW in Pailin region increased by 52% compared with the number reported in the previous six months [CMAA, 2014]<sup>11</sup>. For this reason, this area was chosen by CMAC as target for Billy Goat pilot campaign; the campaign benefited from CMAC good network of salaried and volunteer workers well integrated in the communities, coordinated by Mr Khim Thorn, CMAC Training/Monitoring Officer, native of Pailin, who supported Snail Aid's work for the entire length of the campaign.

After a necessary adjustment of the Khmer translation of the script to adapt the language to the slang spoken by local farmers with the help of local CMAC staff, a team of actors belonging to the local O Torng Pailin Radio Station<sup>3</sup> started recording the six episodes of the drama. Meanwhile, Snail Aid researchers with CMAC staff started a campaign through the countryside with the double aim of interviewing local farmers living and working in at-risk areas and meet local organizations working on development in the area. During one week of intensive travelling around Pailin, Snail Aid reached seven different rural villages and was able to interview 30 dwellers, submitting them the KAP1 questionnaire prepared in collaboration with Brimatech<sup>4</sup> to assess the knowledge about mine risk and safe behaviours of local people before the MRE campaign started. In the same time, it was planned to meet all the local based organizations dealing with development, in order to better understand the reasons of the recent increase in mine casualties. Unfortunately, the area's underdevelopment and isolation resulted evident by the number of organizations reached: only Buddhism for Development, a confessional organization aimed at encouraging and providing support and training to rural people [Mansfield et MacLoed, 2004], and the governmental Department of Agriculture of Pailin Province, could be reached. Both these meetings confirmed how institutions are aware of the local situation, but unfortunately highlighted a lack of structured plans and strategies to improve in any way the quality of life of local rural workers. As in many mine affected areas in developing countries, it is the hunger that pushes needy people to risk their lives cultivating contaminated land, and there is no governmental policy trying to convince poor farmers not to move to the area, where many (but most likely contaminated) parcels are still available [National Institute of Statistics et al., 2014]. However, the results of KAP1 proved that most of the population of Pailin region is not uninformed about mine and UXO threat in the area: on the contrary, many interviewed people showed a quite good knowledge of the principles of safe behaviours, in contrast with the high number of accidents still happening in the area. Snail Aid researchers' feeling was that all this accumulated knowledge, result of frequent MRE traditional sessions (achieved in form of oral presentation, with one lecturer speaking in front of a passive audience), had been memorised and repeated by the villagers as a theoretical lesson, without a real or deep understanding of the practical value and the potential impact of messages on their daily life. This encouraged the staff in going on with Billy Goat Radio project, whose aim is precisely proposing MRE messages in an entertaining way which shouldn't be passively perceived by the target as something extraneous or imposed from the top down [Scapolla et Cepolina, 2013], but actively assimilated through identification with the drama's characters and their lives [Bandura, 1977].

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<sup>3</sup> O Torng Pailin Radio Station, available on FM 97.5 MHz, is one of the two radio stations broadcasting from in Pailin. The other one is National Radio of Kampuchea, which transmits from the same studios on FM 90.5 MHz.

<sup>4</sup> TIRAMISU partner as well, Brimatech is an Austrian market research and consulting company specialised in supporting projects development, which worked with Snail Aid since the beginning of Billy Goat Radio project with the aim to evaluate the effective impact of the tool on the target audience ( [www.brimatech.at](http://www.brimatech.at) ).

Once the actors concluded the recording work, the six episodes of the serial drama started to be broadcast by O Torng Radio, an episode a day, at 10am, as previously agreed with the radio station. Simultaneously with the broadcast, Snail Aid staff started the new phase of the work, travelling every day to a different village to propose each drama episode in a live form to the audience of affected communities. The plan was to perform each episode in front of a group of resident spectators, at the same time of the radio broadcast of the drama. This was a way to present the project to affected communities and their local authorities, to create attachment to the story, to better convey the educational messages and to generate the conditions for community liaison, accomplished by Snail Aid through group discussions carried out after the episode show.

In the first campaign (Algeria 2013), the actors travelled with Snail Aid team from village to village performing every episode in front of the audience: this time, the actors could not participate and the live shows consisted of a projected video whose images followed the rhythm of the recorded episode, which was diffused through a system of loudspeakers. Although it was for sure not as fascinating as a real live performance with actors, the audience reacted to the show in an interested and concerned way, demonstrating to follow the story and the educational messages during all the length of the episode. The active listening of the audience is demonstrated by the fact that out of more than 70 answers to “rapid questions” asked at the end of the live shows to record the level of message and story understanding only 7 were wrong, therefore less than 10%.



Figure 5 – audience in a rural village



Figure 6 – actors recording an episode



Figure 8 – KAP1, interview with a villager



Figure 7 – mine victims among the audience during a group discussion



Figure 9 – MRE game, a moment of the group discussion

Among other activities aimed at fostering community liaison, during the group discussion sessions Snail Aid proposed those people who accepted to answer another questionnaire, KAP2, prepared in collaboration with Brimatech and intended this time to evaluate the effective impact of the educational drama on the listeners.

### Billy Goat Radio after Cambodia – Conclusions

Snail Aid learned a lot during two years of research and two testing and evaluation missions in different parts of the world, diverse for society, environment and educational needs.

The results obtained through the first evaluation carried out in collaboration with Brimatech, showed that Billy Goat reached a very good level of acceptance and comprehension by the listeners [Scapolla et Cepolina, 2014]. This left Snail Aid researchers free to concentrate on the Adaptability System and particularly its part concerning the choice of the best fitting educational messages, on which the second evaluation mission focused on.

Results and feedbacks obtained during the MRE campaigns of 2013 and 2014 are currently being used to tune Billy Goat Radio system toward its final version, in which the Adaptability System will be improved and made more

flexible. Key word of this last phase is simplification: Snail aid decided to work toward a final product simple and easy going in terms of both end-users comprehension and ease of use.

Remembering the difficulties Cambodian delegates (on average probably more educated than the effective future end-users of the tool) encountered in understanding how to use the Adaptability System's parts regarding the MRE messages and the step proceeding from the plot outline to the final script, both these issues have been radically streamlined.

The MRE key messages have been corrected and more simply schematised. Thanks to new inputs and a division in categories of topics, they cover now a more ample spectrum of general and particular situations of mine / UXO threats and the cards can guide the end-users to formulate alone those MRE messages they can't find among the proposed ones. The transition from the adapted plot to a ready script has been dramatically simplified and automatized: before, the end-users were required to remember and manually write down the details and changes they obtained through the Adaptability System, and then to organize them relatively freely in a coherent script. In the new version, after having used the Adaptability System, the end-users will automatically get a script, already perfectly organized and detailed, ready to be print. This necessarily implicates the use of a computer, whose elementary knowledge is one of the basic requirements the end-users must have to use Billy Goat Radio tool, together with adequate English language skills. However, considering the fact that mine affected areas are often in developing countries and in rural areas, where computer literacy may be quite small, every step involving computer use has been conceived to be easily used by operators with very low computer literacy.

The use of a computer has introduced enhancements also in the Adaptability System, which has been renewed too: always in the perspective of a simplification of the whole structure, the already mentioned cards have been juxtaposed with a software system, whose use requires only an elementary knowledge of computer technology and which automatizes the process sparing repetitions and memory exercises to the end-users. The local end-users will be free to choose between the paper and the software system, and through different but analogous processes they will always get to the final adapted version of the story, already written in form of a drama script and ready to be printed. Currently, Snail aid is preparing the updated cards and software versions of both the stories ("The story of Mariam and Yahdi" and "Life of Mliss") available in Billy Goat Radio system.

### **Acknowledgments**

The research leading to these information and results has received funding from the European Community's Seventh Framework Programme (FP7/2007 - 2013) under grant agreement n° 284747. All pictures are courtesy of Silvia Aresca, photographer and researcher of Snail Aid.

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