



REDALERT

D7.5 Pilot Evaluation Summary Report

Report: Pilot Evaluation Summary Report

Project acronym:	RED-Alert
Project full title:	Real-time Early Detection and Alert System for Online Terrorist Content based on Natural Language Processing, Social Network Analysis, Artificial Intelligence and Complex Event Processing
Grant agreement no.:	740688
Responsible:	ICT
Contributors:	SO15, SPP, MOPS, GUCI, SPPS, SIMAVI
Document Reference:	D7.5
Dissemination Level:	PU
Version:	0.4
Date:	10.10.2020



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 740688

History of Changes

<i>Version</i>	<i>Date</i>	<i>Modification reason</i>	<i>Modified by</i>
0.1	28.09.2020	Initial draft	Uri Ben Yaakov (ICT)
0.2	29.09.2020	Review & Update	Stevie Weinberg (ICT)
0.3	30.09.2020	Final Draft	Uri Ben Yaakov (ICT)
0.4	10.10.2020	Review and finalized for submission	Adrian Bradu (SIMAVI)

Table of Contents

1. Executive Summary	5
2. Introduction.....	6
3. Assessment.....	7

List of abbreviations

<i>Abbreviation</i>	<i>Explanation</i>
API	Applications Programming Interface
GUCI	Guardia Civil (ES)
LEA	Law Enforcement Agency
MOPS-INP	Ministry of Public Security – Israel National Police (IL)
SO15	Metropolitan Police Service, Counter Terrorism Command (UK)
SPP	Serviciul de Pază și Protecție (RO)
SPPS	Serviciul de Pază și Protecție de Stat (MD)
WP	Work Package

1. Executive Summary

This report comes to provide a summary of the review and assessment of the RED-Alert system; based on the actual use of the system, mostly based on the activity during the testing and pilot in WP7, but also during the early stages of the development and training. The assessment therefore has been evolved with the evolution of the system itself, which has gone through major improvements since its early stages.

2. Introduction

The vision of the Red-Alert project is to provide a complete toolkit with real-time collaborative capabilities that allows LEAs to collect, process, visualize and store online data related to terrorist groups, whether related to propaganda, fundraising, recruitment and mobilization, networking, information sharing, planning and coordination, data manipulation and misinformation. It also provides the tools to the different LEAs for detecting, analysing relevant alerts, putting the data and intelligence analyst in the centre, but also providing the process to be moderated by manager, viewers and other roles, allowing other roles and requirements of the workflow of the LEAs to be integrated into the system. A good example for that is the need to collect the data while keeping the privacy on the users online without mass collection of users' activity by LEAs.

The specific exercises and testing implemented with LEA relies on simulated and semi-simulated environments for piloting the technology. As known terrorist content will be necessary for the training of the analysis models, a corpus of non-sensitive, non-classified public content of this type was used for testing during the first phase of the pilots. This content was fed into the analysis systems for testing the output in terms of accuracy as well as performance and, above all, to validate that the results are in line with the needs of the LEAs. During the pilot and testing stages, the data was not be enhanced or enriched by any sensitive or classified input by LEAs.

For the real-life users (LEA analysts) to start validating the RED-Alert platform, deployment of the software platform in a simulated real-life environment and the training for users has been realised. The setup for the simulated real-life environment is constructed such that LEA's are enabled to perform daily duties related to threat prevention employing the new software system. After the system has been deployed on the test infrastructure, the LEAs have followed a comprehensive training procedure for using the system. The training procedure is not limited to the presentation of platform functionalities but has also delivered an overall understanding of the state-of-the-art solution and its cross-functional capabilities. Also, special focus is placed on the plan of the deployment of the platform, which includes interoperability with other systems that may be lacking in the simulated real-life environment, such that the smooth transition can be ensured from the pilot infrastructure to the real-life environment.

3. Assessment

To provide an assessment of the tool in its current state, it is prudent from an LEA perspective to understand what we were looking for at the outset of the project.

LEAs entered the project as we had seen a significant rise in how terrorist organisations had started to use social media to spread their messages of hate, provide support and organise attacks. This peaked with the advent of the Islamic State and consequently the upsurge of attacks in countries all over the world.

LEA's across Europe are approached on a weekly basis by companies promoting software solutions to combat this problem. However, repeatedly they are examined and deemed not fit for purpose. They simply don't do what the makers are proclaiming, the tools worked well but the companies' data security or adherence to EU legislation wasn't sufficient. Finally, the tools met all the relevant criteria but were simply prohibitively expensive.

The Red-Alert project offered a unique opportunity to engage with Academia and Developers at an early stage to design a product fit for use.

Having completed both the testing phase final exercise phase, this report is submitted as the LEAs' summary assessment of the tool in its current iteration.

The specifics as to how the testing and joint exercises were carried are detailed in report System Interoperability Report and D7.3 Joint Exercise Report.

It should also be noted that a number of things have changed during the course of the project which has directly affected LEAs' ability to fully test the tool. In the first year of the project, the full effects of the Cambridge Analytical scandal and how they had used Facebook data reached its conclusion. The result of this for LEAs was difficult as part of the development of the tool involved each LEA having a series of API's to relevant social media companies which would then be ingested into the tool. Almost all the relevant social media companies have clauses in their terms and conditions stating that they will not supply their API for data feed to LEA's.

Also, it should be noted that all the LEA's engaged in the project have operational roles. Over the project period the demand in this area has increased significantly with the number of subjects arrested for Terrorist offences at an all-time high, with investigations becoming sufficiently more complex.

To conclude the assessment, LEAs note that RED-Alert is a tool in development, deployed in a testing environment with testing limitations. Whilst there are areas to be improved, LEAs were mostly impressed with the results observed both in testing and in the final exercise. The tool has definitely proved it has the ability to identify relevant posts. It just needs some more refinement relating to the user interaction and experience.

Overall the tool appears to have achieved what the project has set out to do – To provide a real-time early detection and alert system for online terrorist content.