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D2.2 Use Case Definitions

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Glossary

Acronym	Meaning
UC	Use Case
OSN	Online Social Network

1 Introduction

This document presents the results obtained from the second task of WP2. During the M6 consortium meeting, a list of use cases were proposed based on the end users interests and with the main purpose of explaining the different functionalities offered by SAMI2 platform and how it affects the Police research. In consequence, this document includes possible use cases that could be taken into account when performing the user acceptance tests and validation phases during the final part of the project.

A use case is a list of steps, typically defining interactions between an actor and a system to achieve a goal. In general, each use case has one basic course of action and one or more alternate courses of actions. The basic course of action is the main start-to-finish path that the use case will follow, whereas the alternate courses represent the infrequently used paths and exceptions, error conditions.

A realistic approach to use cases is of primary importance in a project's analysis phase. Their purpose is to document the business process that the application must support. Use cases should serve as an effective communication tool between users and technologists.

2 Use Cases

2.1 Use Case 1 - Escrache

Use Case 1	Escrache
Short description	Escrache is a type of demonstration in which a group of activists go to the homes or workplaces of those who they want to condemn and publicly humiliate them in order to influence decision makers and governments into a certain course of action.
Actors	Madrid City Council police officers, attendants, victim, broadcasters, social media
Actors Characteristics	• Maria is a Madrid City Council police officer that belongs to the intelligence analysis team. She is in charge of detecting possible escraches through messages on the net. • Javier is a police officer that normally patrols around a city area. • Undercover agents • Attendants. A group of people aged around 20 years old that go to the escrache. • Mr. Blasco is the victim. He is an old politician that nowadays works as teacher in the university. Next Thursday, he plans to celebrate a conference for his students instead of the normal class. Mr. Blasco has invited a current Spanish politician to be there. • Online Social Network: Twitter will be the network used to broadcast the news about forming an Escrache.
Triggers for using the application	SAMI2 platform is used to detect messages related to escraches on Twitter
Functionalities included	- Use of semantics to link information found in the network - Adaptive tune of the system to its expected behavior according to the police feedback - Relevance analysis – messages coming from or related to the Madrid area - Identification of the locations cited in the message and from which the message was sent.

Use Case Description	There is a planned conference by Mr. Blasco at Madrid university to which a Spanish politician will attend. Due to the fact that the elections will be celebrated in 2 weeks, several security measures are deployed. A number of undercover policemen from the Madrid City Council are in the university surroundings while the ones in the office are monitoring the social networks to detect possible troubles. The people of Madrid City Council are using a new tool to recognize conflictive messages in OSNs called SAMi2. Based on this tool and the potentially controversial meeting that takes place today, the search of suspicious tweets is carried out. 1. Maria: authenticates on the system with success. 2. SAMi2: shows the home page with the monitoring actions that can be carried out. 3. Maria: selects filters for the search based on location, time, popularity and key words. In this case, the key words are: "university", "politicians" and "escrache". 4. SAMi2: shows the results with a statistic of the most recent and popular tweets containing these key words. 5. Maria: reviews the results and evaluates the search providing feedback to the system on how relevant results are. 6. SAMi2: learns from the results obtained taking into account the evaluation of the user and stores them. With the information gathered, Maria detects that an escrache event is planned at university. Instantaneously, Javier, the police officer in the street, and also the undercover agents are advised of the situation and they go to the university main entrance. There are some teenagers waiting on the door carrying tomatoes and eggs and the Police agents proceed to arrest them. Fortunately, Javier and the other agents have arrived on time and can stop the escrache.
Alternative flows	Step 6. Police at the office disagree with the results provided by SAMi2. SAMi2: A new search is carried out due to the original one did not give nothing relevant
Ethical and legal issues	Ethics requirements (D7.1)

In general, and for all cases, it is assumed that the SAMi2 system is in good working order and regular checks as to validity and veracity of results have been carried out. These checks need to be logged, and any problems or updates noted – automatically in the system (in a way that is not open to misuse and abuse) and by the engineer given the authority to maintain the system. Institutional process should be in place to avoid error and abuse of technical knowledge.

Ethics RQ1: Identify scope of system use, particularly the limits and boundaries of use.
In this case the scope includes the aims and objectives of use, i.e. to prevent the illegal escrache and arrest the persons gathering at the scene with the intention of taking part in the escrache.
It should be noted that the system will automatically include innocent people in its scope of use.
Ethics RQ2: The system must support fundamental human rights within the boundaries given in the context of use (policing and legitimate aims of protecting citizens and preventing crime), and avoid stereotyping and discrimination on the grounds of ethnic origin, political opinion, and religious beliefs.
The system will support the fundamental right of free speech (on behalf of the university conference), but at the same time attempts to prevent the right of free speech to people who disagree with the politicians. However, under the European Convention of Human Rights (Article 10)this right can be restricted "for the prevention of disorder or crime"
If the escrache event faces a situation of threat or coercion, it becomes an illegal activity and the people participating in it are aware that they are realizing an illegal activity (which presumably they do), the actions of the police are legitimate.
If a gathering to express a difference of opinion is planned, and no intent to harm the opposition or cause disorder is evident,the question arises whether the arrests are justified.
Ethics RQ3: To protect innocent people the system must have the ability to anonymise data, and de-anonymise if necessary (with a rational for de-anonymisation provided).
It should be noted that in any use of the SAMi2 system innocent people may be included in the results of a search. In this case the intention is for the police to attend the location of the escrache, and arrest the people present. In these circumstances there is no need for the police to know the identities of the people whose messages are in the SAMi2 system, and de-anonymisation is not necessary.
Ethics RQ4: All actions on the system taken by users must be logged, and individual users' identified (through authentication mechanisms).
This requirement applies to all actions on the system regardless of context.

Table 1 Use Case 1: Escrache

2.2 Use Case 2 - Gangs

Use Case	Gangs
Short description	While a football match takes place two rival supporters' gangs plan a fight.
Actors	Gangs, police officers and undercover agents
Actors Characteristics	• Gang compound of Real Madrid supporters • Gang compound of Atlético de Madrid supporters • Undercover agents pretending to be gangs' members • Police officers which monitor the OSNs looking for suspicious messages
Triggers for using the application	SAMI2 platform is used to detect suspicious messages related to gangs' conflicts on the internet.
Functionalities included	− Detection of suspicious messages on the social networks − Identification of the locations cited in the message − Identification of the time instants mentioned in raw text − Relevance analysis – messages coming from or related to the Madrid City area
Use Case Description	This Saturday there is a football match in Santiago Bernabeu Stadium between "Real Madrid" and "Atlético de Madrid". It is well-known that there is a historic rivalry between the teams and especially among the fans so there is always extra police equipment when a local derby takes place. The police intelligent analysis team is looking on the network along all the week for planned fights or confrontations among supporters. To detect this, police officers are working continuously with SAMI2. The interaction between the police officers and SAMi2: 1. Police officers: authenticate on the system with success. 2. SAMi2: shows the home page with the monitoring actions that can be carried out. 3. Police officers: select filters for the search based on location: Madrid and key words: "Real", "Madrid", "Atlético", "match". 4. SAMi2: shows the results with a statistic of the most recent and popular tweets containing these key words and that come from or are related to Madrid

	5. Police officers: review the results and evaluates the search. They find an appointment for a fight between two gangs meanwhile the match goes ahead. 6. SAMi2: learns from the results obtained taking into account the evaluation of the user and stores them. Thanks to the detection of the messages on the social network using the SAMI2 platform, the conflict is avoided. A group of undercover agents appear on the fight emplacement simulating they are also gang's members and avoiding the fight on time thanks to the deployment of reinforcements in the place for conflict.
Ethical and legal issues	Ethics requirements (D7.1) Ethics RQ1: Identify scope of system use, particularly the limits and boundaries of use. *In this case the scope includes the aims and objectives of use, i.e. to prevent public disorder and so protect the public. It should be noted that the system will automatically include innocent people in its scope of use.* Ethics RQ2: The system must support fundamental human rights within the boundaries given in the context of use (policing and legitimate aims of protecting citizens and preventing crime), and avoid stereotyping and discrimination on the grounds of ethnic origin, political opinion, and religious beliefs. *Under the European Convention of Human Rights (Article 11, 1) everyone has the right to freedom of peaceful assembly and to freedom of association with others. In this case however clause 2 gives an exemption when in the "interests of national security or public safety, for the prevention of disorder or crime".* Ethics RQ3: To protect innocent people the system must have the ability to anonymise data, and de-anonymise if necessary (with a rational for de-anonymisation provided). *There seems to be no case for de-anonymisation in this instance. It may be that in the case of 'gangs' some names may already be known to the police (from the police system, previous convictions) but identification in this way would be an uninentional 'by product' of the search – as the search terms will not be specific names, but keywords as given below.* Ethics RQ4: All actions on the system taken by users must be logged, and individual users' identified (through authentication mechanisms). *This requirement applies to all actions on the system regardless of context.*

Table 2 Use Case 2: Gangs

2.3 Use Case 3 – Illegal Events

Use Case	Illegal Events
Short description	During the day of reflection[1], some people who belong to the "A" party are organizing an illegal demonstration against the candidature as President of the Government of an alleged corrupt business man who is member of the "B" party.
Actors	Luis, Maria and followers of the "A" party on Twitter
Actors Characteristics	• Followers of the "A" party on Twitter • Luis, an alleged corrupt business man candidate for Government President who belongs to the "B" party • Maria is a police officer that belongs to the intelligence analysts team. She is in charge of detecting possible altercations during the day of reflection through messages on the net.
Triggers for using the application	SAMI2 platform is used to detect and prevent illegal events during the day of reflection.
Functionalities included	− Detection of the topic of conversations(the search of tweets using only "elections" as key word could not be useful so the detection of topics of conversation is broader) − Use of semantics to identify relationships between current author and other messages authors – retweets in the case of Twitter − Identification of the locations cited in the message − Identification of the time instants mentioned in raw text − Relevance analysis – messages coming from or related to the Madrid area
Use Case Description	Since the announcement of Luis as candidate for the Presidency of the Government, several manifestations and citizen revolts have been organized to protest against his candidature for president. Several sources accuse Luis of being a corrupt business man. Even yesterday, the day of closure of the election campaign, a citizen demonstration took place.

[1] In Spain, during the "day of reflection" (i.e. the day before elections and the elections day itself), the diffusion of election advertising and the realization of acts that can influence the decision of citizen such as manifestations, acts of electoral campaign, etc. are forbidden.

	Thus, today, the reflection day, when the organization of propaganda such as manifestations or election campaign activities is illegal, extreme searches looking for the organization and realization of these activities are carried out.

On the one side, members of the "A" party are organizing a surreptitious illegal manifestation in Madrid through Twitter, encouraging its members to participate.

On the other side, people from the Madrid City Council are using SAMi2 with the aim of detecting and preventing illegal activities, especially those related with the elections. In Twitter, the search of suspicious tweets is carried out.

  1. Maria: authenticates on the system with success.
  2. SAMi2: shows the home page with the monitoring actions that can be carried out.
  3. Maria: selects filters for the search based on location: Madrid, time, popularity and key word: "elections"
  4. SAMi2: initiates a research looking for messages which have as topic the elections and which specifically mention the word "elections", obtaining also locations and time periods and shows the results
  5. Maria: evaluates the results of the research. Surprisingly, she discovers that most of the people, whose identity is not known, that have retweeted these tweets are followers of the "A" party page on Twitter.

The results provided by SAMi2 include the time and locations where the manifestation will take place. Policemen in the streets are advised and immediately go to the manifestation place. Thanks to the efficiency of SAMi2, the manifestation is aborted before its beginning and some members of the "A" party are arrested there. |
| Ethical and legal issues | Ethics requirements (D7.1)

Ethics RQ1: Identify scope of system use, particularly the limits and boundaries of use.
In this case the scope includes the aims and objectives of use, i.e. uphold the law relating to the 'day of reflection' (in the political sense, prior to the election day).

Ethics RQ2: The system must support fundamental human rights within the boundaries given in the context of use (policing and legitimate aims of protecting citizens and preventing crime), and avoid stereotyping and discrimination |

	on the grounds of ethnic origin, political opinion, and religious beliefs._ _There is no specific mention in the European Convention of Human Rights with regard to political processes, but the opening paragraphs state that the 'fundamental freedoms' to be maintained rely on an 'effective political democracy' and further under freedom of expression (Article 10) that restrictions or penalties as are prescribed by law and are necessary in a democratic society. As the law in Spain prohibits certain activities on reflection day, and the law has been arrived at through the democratic process, the rationale for the law gains legitimacy from the public._ Ethics RQ3: To protect innocent people the system must have the ability to anonymise data, and de-anonymise if necessary (with a rational for de-anonymisation provided)._ _There seems to be no case for de-anonymisation in this instance if the intention is to discover the location of an event (as opposed to the identities of the people who are tweeting about it) and prevent it, and/or arrest those attending._ Ethics RQ4: All actions on the system taken by users must be logged, and individual users' identified (through authentication mechanisms)._ _This requirement applies to all actions on the system regardless of context._

Table 3 Use Case 3: Illegal Event

2.4 Use Case 4 – Hate Speech

Use Case	Hate Speech
Short description	After the detection of two militants of a Nazi group in France, several messages and illegal manifestations in support of the detainees are arisen across Europe. Madrid is one of the main broadcasting sources. Currently, a Nazi group is organizing an illegal and violent manifestation for next Wednesday.
Actors	Madrid City Council Police researchers and people who belong to or follow racist groups
Actors Characteristics	• Madrid City Council Police Researches. People from the police in charge of detecting hate speeches on the net. • Racist groups. People who are posting racist messages
Triggers for using the application	SAMI2 platform is used to detect racist messages or hate speeches on the Internet.
Functionalities included	− Identification of a wide range of words, specific abbreviations or simply misspellings commonly used in tweets, adapting to trends of use of language in Twitter − Detection of messages in the social networks with racist key words − Capability of processing messages in English and Spanish − Relevance analysis – messages coming from or related to the Madrid City area − Analysis of current messages not forgetting past related messages
Use Case Description	Several activities of support to the two Nazis arrested two weeks ago are being organized in cities across Europe. Madrid is one this cities. To prevent and fight against these activities, a sector from the Madrid City Council police is trying to detect racist and hate speech actions on the Internet. Twitter is one of the analyzed OSNs, due to the facility to access to a concrete topic and the fact that most of the information is public (SAMi2 only finds information in the public domain). For

	monitoring this OSN, Madrid City Council police make use of a new tool called SAMi2. The interaction process between the Police and SAMi2 is: 1. Police agent at the office: authenticates on the SAMi2 system 2. SAMi2: shows the home page with the monitoring actions that can be carried out. 3. Police agent at the office: initiates a research, based on some specific words, which aims to detect messages containing hate speeches or racist activities which come from or are related to the Madrid City area. 4. SAMi2: initiates a research. Through the use of semantics, several racist messages in English and Spanish are detected. In addition, other messages which contain information about a manifestation are analyzed under the hash tag #SWP. Based on current messages and other past messages related, SAMi2 finds out that the meaning of this acronym is "Supreme White Power" and that a violent and illegal racist manifestation is being organized for next Wednesday. 5. Police agent at the office: verifies the information 6. SAMi2: learns from and stores the results in order to relate them with future messages and adapt to user preferences After the results, policemen in the streets and law enforcement agencies are advised in order to prevent the illegal demonstrations and violent activities derived from it.
Ethical and legal issues	Ethics requirements (D7.1) Ethics RQ1: Identify scope of system use, particularly the limits and boundaries of use. *The scope of use for this case is to protect the public against racist activities, in 'promoting full and effective equality' in line with the European Convention on Human Rights.* Ethics RQ2: The system must support fundamental human rights within the boundaries given in the context of use (policing and legitimate aims of protecting citizens and preventing crime), and avoid stereotyping and discrimination on the grounds of ethnic origin, political opinion, and religious beliefs. *The actions in this case support Article 1 (1) of the European Convention on Human Rights states: The enjoyment of any right set forth by law shall be secured without discrimination on any ground such as sex, race, colour, language, religion,*

	political or other opinion, national or social origin, association with a national minority, property, birth or other status. Although there is discrimination against the Nazi group (and their political ideals) the actions in this case meet the exemption in the Convention (introduction) "Reaffirming that the principle of nondiscrimination does not prevent States Parties from taking measures in order to promote full and effective equality, provided that there is an objective and reasonable justification for those measures". Ethics RQ3: To protect innocent people the system must have the ability to anonymise data, and de-anonymise if necessary (with a rational for de-anonymisation provided). *There seems to be no case for de-anonymisation in this instance if the intention is to discover that an event may be planned, and through the use of 'media' try to prevent it.* Ethics RQ4: All actions on the system taken by users must be logged, and individual users' identified (through authentication mechanisms). *This requirement applies to all actions on the system regardless of context.*

Table 4 Use Case 4: Hate speech

2.5 Use Case 5 – Post-mortem analysis

Use Case	Post-mortem analysis
Short description	Analysis of the social network in order to analyze if a conflict has been stopped on time.
Actors	Police and people planning the conflict
Actors Characteristics	• Police: People from the police in charge of the post-mortem analysis
Triggers for using the application	SAMI2 platform is used to detect if a conflict is postponed after it is stopped.
Functionalities included	− Detection of messages in the social networks to know if a conflict is stopped on time or it is postponed. − Identification of the locations cited in the message − Identification of the time instants mentioned in raw text − Relevance analysis – analysis of the most recent messages received but not forgetting their relationships with past related messages
Use Case Description	Once a conflict is solved and deterred, the police need to monitor what happens after and how the groups planning conflicts react. In some occasions a quick broadcasting occurs and the battle is postpone in a different place. In this moment SAMI2 has to detect if some event occurs after the conflict has been solved. Twenty-four hours after the conflict is solved, police still catch messages using the tool SAMi2. The interaction between them is the following: 1. Police agent at the office: authenticates on the SAMi2 system 2. SAMi2: shows the home page with the monitoring actions that can be carried out. 3. Police agent at the office: selects a research based

	on a previous stored case. After filling in some fields, the research is carried out 4. SAMi2: initiates a research. Through the use of semantics, several new messages related to the conflict are found. These messages are compared with other past related messages in order to link them. 5. Police agent at the office: verifies the information and discovers that, although some messages have been found related to the conflict, it can be considered that the conflict has been stopped.
Ethical and legal issues	Ethics requirements (D7.1) Ethics RQ1: Identify scope of system use, particularly the limits and boundaries of use. *The scope of use for this case is monitoring the status of a conflict after it appears to have been stopped, whether it has just been postponed and will re-occur. It is explicitly stated in the description that the original conflict situation would be in breach of the Spanish law.* Ethics RQ2: The system must support fundamental human rights within the boundaries given in the context of use (policing and legitimate aims of protecting citizens and preventing crime), and avoid stereotyping and discrimination on the grounds of ethnic origin, political opinion, and religious beliefs. *The type of 'conflict' situation is not fully described, but in order to support human rights the conflict would need to have been breaking one or more of the fundamental human rights.* Ethics RQ3: To protect innocent people the system must have the ability to anonymise data, and de-anonymise if necessary (with a rational for de-anonymisation provided). *There seems to be no case for de-anonymisation in this instance if the intention is to discover whether a previously planned event that has been stopped is likely to be re-occur.* Ethics RQ4: All actions on the system taken by users must be logged, and individual users' identified (through authentication mechanisms). *This requirement applies to all actions on the system regardless of context.*

Table 5 Use Case 5: Post-mortem analysis

2.6 Use Case 6 - Terrorism

Use Case	Terrorism
Short description	Analysis of the social network in order to detect possible terrorist actions
Actors	• Police researchers • Jihadists
Actors Characteristics	• Police who daily track Online Social Networks looking for criminal activities and content • Jihadists who post videos, images and publicity encouraging people to join to holy war
Triggers for using the application	SAMiI2 platform is used to detect a jihadist cell in Spain which collaborates in terrorist activities with the most powerful Islamist movements
Functionalities included	− Use of semantics to detect messages related to jihadists actions − Time analysis: in which moment a message have been posted − Space analysis: where the message comes from
Use Case Description	Two hours ago, the Sunni Jihadists group Islamic State posted in Online Social Networks a video in which the decapitation of an English man was shown. Related to this video, in Spain, some messages and advertisements encouraging participating in the holy war are being posted too. A group from the Police Research Department in charge of detecting illegal actions and criminal content in Online Social Networks, which recently installed SAMI2, starts to monitor tweets in search of messages of response to the Jihadist video. The interaction of the police with SAMi2 system is the following: 1. Police agent: authenticates on the system with success 2. SAMi2: shows the home page with the monitoring actions that can be carried out 3. Police agent: select filters based on key words such

	as "jihadism", "terrorism" and "murder". 4. SAMi2: based on the filters selected by the police through the GUI, initiates a semantic research of messages containing these words or topic. 5. Police agent: verifies the results and selects the tweets more relevant 6. SAMi2: learns from the police preferences and carries out an analysis of the time and location of these most relevant messages. After known the time and location of the messages which are more relevant for police, they discover that a lot of them were posted in Cuatro Caminos, a district of Madrid, where one of the most important mosques of the community is located. Suspecting about the huge quantity of tweets from this location, Police decides to go there to have a look. Once there, they ask people about suspicious activities near to the mosque. After interrogating some witnesses, those responsible for the messages are identified. The police check their identity and exchange the information with data bases belonging to other security forces. Thanks to that, an important Jihadist cell in Spain, belonging to the most radical section of Islamic State and implicated in some international terrorist acts, is dismantled.
Ethical and legal issues	Ethics requirements (D7.1) Ethics RQ1: Identify scope of system use, particularly the limits and boundaries of use. *The scope of use for this case is crime prevention and protecting the public.* Ethics RQ2: The system must support fundamental human rights within the boundaries given in the context of use (policing and legitimate aims of protecting citizens and preventing crime), and avoid stereotyping and discrimination on the grounds of ethnic origin, political opinion, and religious beliefs. *Relevant Human Right would be Article 8, Freedom of thought, conscience and religion - except (Article 8, 2)* *"Freedom to manifest one's religion or beliefs shall be subject only to such limitations as are prescribed by law and are necessary in a democratic society in the interests of public safety …"* Ethics RQ3: To protect innocent people the system must have the ability to anonymise data, and de-anonymise if necessary (with a rational for de-anonymisation provided).

	There seems to be no case for de-anonymisation in this instance as it is the time and location which are relevant. It must be noted that if the identities of the people sending the tweets need to be sought then the proper processes must be adhered to.
	Ethics RQ4: All actions on the system taken by users must be logged, and individual users' identified (through authentication mechanisms).
	This requirement applies to all actions on the system regardless of context.

Table 6 Use Case 6: Terrorism

2.7 Use Case 7 – Court actions

Use Case	Court actions
Short description	After the victory of *Maccabi* of Tel Aviv in the basketball Euro League, the frustration for the Real Madrid defeat, led to hundreds of people to post racist and anti-Semitic messages in OSNs under the hash tag "#putosjudíos" (Spanish for *fucking Jews*). Thanks to SAMi2, the five more active Twitter users were identified and denounced before the Jew Community Prosecution Office
Actors	• Racist Twitter users • Police • Judicial personnel
Actors Characteristics	• Police who daily track Online Social Networks looking for criminal activities and content • Racist Twitter users who post racist messages
Triggers for using the application	The forensic module of SAMi2 allows the use of the data obtained through it in court actions.
Functionalities included	- Anonymizer which allows Twitter users ensuring the anonymity - Capacity of detecting which was the tweet "one", i.e. the first person sending the tweet - Forensic functionality which allows keeping the custody chain
Use Case Description	Matching with the Real Madrid defeat at the hands of *Maccabi* of Tel Aviv, several racist Tweets were posted under the hash tag "*#PutosJudios*" After the match, police officers start to monitor the net looking for polemic messages or illegal actions. The interaction between SAMi2 tool and police officers is the following: 1. Police officers: authenticate on the system with success 2. SAMi2: shows the home page with the monitoring actions that can be carried out

	3. Police officers: select filters based on key words such as "jew", "jewel", "Real", "Madrid" and "basket". 4. SAMi2: based on the filters selected by the police through the GUI, initiates a semantic research of messages containing these words or topic. 5. Police agent: verifies the results and selects the tweets more relevant. Based on these relevant tweets, police officers select the option of determining which was the origin of these tweets (who published the tweets so much time retweeted) 6. SAMi2: shows the user ID (a random number) of the authors of the Tweets. Five authors are the most active, however, the anonymizer module avoid showing the identity of these users 7. Police officers: store the results in the forensic module in order to be used in future court actions. Because identifying users is against the Terms of Service of Twitter and some European Directives about Privacy, police officers start a legal action to identify these users. When the court order is received, police officers are allowed to identify the users. Once they have been identified, police officers denounce them. A court action is carried out against them who are condemned to jail. The use of the results stored in the forensic module of SAMi2 are key to punish these users
Ethical and legal issues	Ethics requirements (D7.1) Ethics RQ1: Identify scope of system use, particularly the limits and boundaries of use. *The scope of use in this case is providing the courts with the material that is relevant to the case. The case demonstrates that it is crucial, in order to make fair and unbiased judgements, that the evidence is valid and has integrity (i.e. has not been tampered with, or altered in any other non-intentional way)* Ethics RQ2: The system must support fundamental human rights within the boundaries given in the context of use (policing and legitimate aims of protecting citizens and

	preventing crime), and avoid stereotyping and discrimination on the grounds of ethnic origin, political opinion, and religious beliefs.
	The Convention on human rights puts a general prohibition on any discrimination (that puts the equality of application of human rights at risk). In respect of court actions in this case it is Article 6 of the Convention on Human Rights - the Right to a fair trial – that is most relevant.
	Ethics RQ3: To protect innocent people the system must have the ability to anonymize data, and de-anonymize if necessary (with a rational for de-anonymisation provided).
	There seems to be no case for de-anonymisation in this instance. It must be noted that if the identities of the people sending the tweets need to be sought then the proper processes must be adhered to.
	Ethics RQ4: All actions on the system taken by users must be logged, and individual users' identified (through authentication mechanisms).
	This requirement applies to all actions on the system regardless of context.

Table 7 Use Case 7: Court actions

3 Conclusions

In this deliverable selected SAMI2 use cases have been detailed trying to provide a complete overview of SAMI2 possibilities. With these use cases how SAMI2 can help security forces in prevention and detection of illegal content and activities is shown.

The cases shown above are only a sample of the wide range of possibilities that emerge thanks to SAMI2. The key aspects are the automatic detection and analysis of suspicious messages determining its user identifier, location, date, time and being able to link them in a transverse way with the information gathered in other OSNs. Forensic module is also a key aspect that will allow using all the collected information in court actions.

Therefore, SAMI2 can provide effective mechanisms to facilitate the work of security forces in fighting against crime through the State of the Art semantic technologies, easing tasks which traditionally have been carried out manually.