## **SAFER PYRENEES**

Final Report 06/2016 ECHO/SUB/2013/671435

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# 1. General reminder of project objectives, partnership and expected deliverables.

The main objective of the project "Safer Pyrenees" was the improvement of the preparedness for emergencies in the cross border area of the Pyrenees. This general objective included the following specific goals:

- Improve of the risk, resources and the infrastructures knowledge
- Improve effectiveness of the response and operations
- Improve the operation coordination between both countries in border area
- Improve population awareness

Three partners implemented this project: The Emergency Agency of Navarra (ANE), the "Service Départemental d'Incendie et de Secours (SDIS)" of Pyrenees Atlantics and the Government of Navarra (GN). These partners provided all their knowledge, equipment, systems, communication networks and human resources to achieve project objectives. The Government of Navarre did overall project coordination.

To achieve these ambitious objectives the following actions were implemented by project partners:

- Risk assessment and mapping
- GIS interface to share existing territorial resource and infrastructure layers
- Response Protocol development
- Improvement and adaptation of existing equipment and materials for cooperation
- Emergency radio communication coverage improvement
- Interconnection of both emergency radio networks to provide operational communication
- Training in response protocols
- Development of public awareness materials and events
- Simulation Exercise
- Task Publicity

Project expected results achieved can be summarized as follows:

- Improved emergency preparedness
- Improved coordination
- Common risk, resource and infrastructure GIS layer and databases
- Connected emergency radio network for common actuations and operations
- Common response protocols
- Civil awareness improvement

## 2. General summary of project implementation process

### General overview of the process

The process of project implementation, involving the successful development and introduction of the project in the organizations, presented an ongoing challenge for managers. The project implementation process was complex, requiring simultaneous attention to a wide variety of human, administrative, budgetary, and technical variables.

A bi national project management team was established, and each of the 3 partners appointed a coordination focal point who was responsible for the realization of activities planned for each of the partners. This team prepared the overall project working plan and they supervised the work done by each of the task teams, controlling the project evolution in time and budget. Overall coordination and reporting was developed by Government of Navarra's project manager.

For each of the tasks and actions, technical teams were appointed. Effective task management required managing all aspects of a task, including its status, priority, time, human and financial resources assignments and so on.

#### Analysis of initial and actual time schedule

Internal administrative challenges at the beginning of the project resulted in delays in availability of funds, which finally resulted in concentration of project Tasks in the second year of the project.

Additionally, organizational changes in the project partners resulted in changes to the project management team. Fortunately these changes did not critically affect the development of the project, although some delays were experienced due to this fact.

Some of the intervention which required physical infrastructure deployment (HELPoints mainly) experienced delays in its installation due to weather conditions: snow accumulation did not permit access to sites during winter season.

#### Planned and used resources

No significant deviations in the project budget were given, although there were some worth mentioning changes:

- Travel related expenses were clearly overestimated, and finally we only incurred in minor travel costs. Anyway, many of the travel costs incurred during project implementation were not recorded, as they were directly assumed by project partners.
- On the other hand, personnel cost were underestimated and own personnel involvement was clearly higher than projected.
- Equipment acquisition and external services final expenditure was aligned with projected expenses.
- Although overall project expenditure was in line with budget, expenditure by partner experienced some changes from was budgeted in partner agreements, having more expenditure the Government of Navarra and less the SDIS.

#### Expected and actual results

Details on task development and project results will be described in following charters, but in general terms it can stated that the results of the project were met to 90%.

## 3. Evaluation of project management/implementation process

### Positive aspects / opportunities

High involvement of both managers and technical personnel of the 3 partners in the project has resulted key for successful project's implementation.

Although at the beginning of the project we were afraid about coordination problems due to language, this hasn't been a real problem at the end, and communication has been pretty fluid and it has improved along project life cycle.

#### Internal and external difficulties encountered

Project manager had responsibility for successful project outcomes without sufficient power, budget control, or people to handle all of the elements essential for project success. This problem was overcome with the involvement of high rank managers at critical moments of project implementation.

Organizational changes in the project partners resulted in changes to the project management team. Fortunately these changes did not critically affect the development of the project, although some delays were experienced due to this fact.

### Cooperation with the Commission

The cooperation with the Commission was always easy and direct. Having a unique focal point in the Commission for every issue during project life cycle was key to facilitate project implementation.

### Lessons learnt and possible improvements

Worth to mention three main lessons learnt and possible improvements in terms of project implementation:

- The necessity of doing a detailed previous analysis of needs and requirements, and not underestimate the efforts and resources required to develop and coordinate a project of this characteristics.
- Developing a thorough "dissemination and communication plan" within the first 3 months of project life to ensure maximum impact of the project during its life span and sustainable benefits, in terms of best practices after the project is ended.
- The timeframe of 60 days after project completion to produce the project's final report has resulted not sufficient for partners.

## 4. Project Tasks and Actions

#### Task 1: Risk assessment and mapping.

Determine the nature and extent of risk in west Pyrennes and model risk scenarios to build upon preparedness measures. Develop common databases of risk maps, resources and infrastructures.

#### Task 1 Action A.1: Risk scenarios selection, modeling and analysis.

A bi national task team was established. Several meetings have taken place in Pamplona, Baiona and Pau. This team recollected all the available documentation of risk information in each border side.

SDIS shared with ANE their "Dossier départamental des risqué majeurs (DDRM)". There was not a similar comprehensive document in Navarra, but ANE committed and put together all available information regarding risks in Navarra and to share it with SDIS.

Initially, it was thought to acquire flood simulation software to simulate flooding in some of the most vulnerable river basins at the border area. This idea was modified, and in its place an external assistance was subcontracted to the Public University of Navarra to improve the existing risk documentation. The scope of the external assistance included:

- Existing natural risk prevention systems analysis
- Occidental Pyrenees natural risk analysis and prevention
- Oriental Pyrenees natural risk analysis and prevention

To complement existing documentation, and taking into account recent floods occurred in 2014 in border area, an external assistance has been subcontracted to the Public University of Navarra (UPNA) to analyse existing flood monitoring and early warning system in the north of Navarra, in concrete rivers and rivers basin coming from the border area and the Pyrenees (Salazar-Roncal, Aragón -Irati, Arga and Bidasoa rivers and basins).

UPNA used in their analysis, and recommended for further use, free simulation software, thus it was not necessary to acquire or pay for any software license.

## Task 1 Action A.2: Common databases of risk maps, resources and infrastructures.

A bi national task team has been established. Several meetings took place in Pamplona, Baiona and Pau.

The action 2 team recollected all the available documentation of GIS systems and maps in each border side. Then they followed this course or action:

- Exchange a detailed list of available vector layers
- Investigate the compatibility or possibility of transformation between raster formats.
  - Define the geographical area of interest to interchanged layers.
  - Define the way and frequency to exchange information.

Finally, a formal Agreement document to three parts was produced and signed. The signatories of the Agreement are the Government of Navarra, the SDIS and the Platform of Mutualised Geographic Information of Aquitaine.

This agreement provides a framework to interchange GIS information between Navarra and Pyrenees Atlantics, and includes:

- The conditions for the exchange of geographic files described between partners.
- The general conditions for granting rights to use the files made available
- The obligations of the partners, in turn, owner and user.

Initially vector layers were interchanged and once the Agreement was signed "raster data" were interchanged. The Agreement establishes doing this interchange annually.

### Task 2: Response protocols and binational response capacities enhancement

Improve cross border civil protection cooperation regarding preparedness for, direct response to and reducing consequences of disasters and / or emergencies situations.

#### Task 2 Action A.1: Response Protocols

Initially an agreement between ANE and SDIS was reached to produce the following joint response protocols and procedures:

- Generic protocol for mutual aid. This protocol would define the extend and the conditions of mutual aid in the case one of the organizations would ask the aid of the other. This mechanism could be activated, for example, in the case that one of the partners is involved in one large scale operation that could leave unprotected the border area. In that case the other partner could cover that area.
- First call and general inter-centre coordination. This protocol would establish the inter functioning and communications between both emergency coordination centers.
- A number of joint operations procedures (to be defined) will be produced. Some initial areas of interest to think about are missing people, fires in "ventas", forest fires, sportive risks (ski, mountaineering and climbing, caving), earthquake, Camino de Santiago, helicopter use etc.

The task team was conformed for the process of recollecting available protocols documentation in each border side that could be in the interest. Additionally, an external assistance was subcontracted by the ANE to help with protocol drafting.

The development of most part of the protocols committed under Task took place in the second year of the project. Although some of them, as the wildfire protocol, were drafted the first year.

While this joint response protocols are already operational, for them to be official for Pyrenees Atlantics, SDIS is still developing the bureaucratic process for these protocols to be officially endorsed by national authorities.

#### Task 2 Action A.2: Emergency Equipment

The objective of this action is acquiring the equipment required for joint response and to adapt the equipment standards of the two countries for joint operations. This action completes the action A.1, through the acquisition of equipment necessary for the actions described in the protocols.

Both ANE and SDIS agreed on the equipment they were lacking, mainly thinking in the simulation exercise that was held in November 2015. The equipment acquired was:

- Various elements and materials for rescue operations.
- Thermal imaging camera for searching in collapsed structures.
- Mark IV baby ambulance reanimation device.

## **Task 3: Emergency Communications**

Improve the situation awareness of both tactical and coordination response teams by sharing mission based information for adequate response to disasters and emergency situations.

## Task 3 Action A.1 Radio Network coverage improvement Technical Project Development

A bi national task team was established. The team visited both radio infrastructures in Spain and France. They worked together in the measurement of the actual covertures, and the definition of the necessary improvement to cover the project area.

This team identified four priority border action places: St James way, Belagua-Aret Sky Stations and Zugarramurdi.-Sara- Urdax coves and Irati Forest. These places actually didn't have emergency communication, although they are very important touristic sites with large concentrations of people in high seasons.

The technical projects for the emergency communications in the 3 priory areas were elaborated in 2014. In 2015 an extension of St James Way network and an additional technical project for a network in Irati Forest was elaborated.







Figure 1: Abodi site technical project

Additionally the technical evaluation and measured of radio covertures in the border area of Pyrenees Atlantics advised the acquisition of a mobile TETRAPOL base station for SDIS use.



Figure 2: In field covertures tests

All of this projects included site selections, physical infrastructure and technical designs. In the case of the HELPoints, they were considered as pilot experiences to evaluate its feasibility and sustainability in the long term, due to the difficulties of deploying this kind of outdoor solutions (inclement weather, theft, vandalism).



Figure 3: Initial projected infrastructure in St James Way

In this phase municipal and environmental licenses were obtained for the new sites to be deployed (Abodi, St James Way and Irati Forest). For the other locations existing telecommunication centers were used.

### Task 3 Action A.2: Gateway Development

France and Navarre use different Digital radio Systems for the Emergency Communications. France uses TETRAPOL and Navarre uses the TETRA standard. In this moment there is no gateway in the market that permits the intercommunication of the both types of networks. This problem is not an isolated problem between France and Spain. The same problems exists in the cross border between France and Germany for example as Germany uses also TETRA. It is for that reason that SAFER project proposed designing a gateway that permits the intercommunication of both network technologies.

A binational technical team was conformed and various interconnection approaches were analyzed until a final solution was agreed between technical personnel and partners. After that, the SDIS put in place a procurement procedure to acquire the equipment.

Interconnection solution equipment was installed and configured in June 2015. Initial testing was done but although interconnection was accomplished, difficulties in radio communications where experienced. Due to that equipment was uninstalled and sent back to the vendor for troubleshooting. Interconnection was reinstalled in October 2015.

Although additional testing has been done since that moment, system is not fully operational yet: connection is established and signaling is channeled, but voice communications don't get through. Final testing and validation is been programmed to be done in 2016.

#### Task 3 Action A.3: Emergency communication networks deployment

Following the technical projects drafted in action A1 the deployment of emergency networks were accomplished as follows:

#### • TETRA network extension

First base station was installed in Larrun in 2014. After doing system validation and testing this BS was included in the network.

A second base station for coverage of Belagua area (covering ski resorts) was installed in 2014 in an optimal location of a private operator (housing agreement was reached). After testing this BS is today and since 2014 fully operative in the network.

The third Base Station installed in Abodi, was fully operation by June 2015, ready for service during the Irati Xtream, a bicycle popular bike race in the area. In fact an emergency operation was held in the area in that occasion with one missing person in the forest overnight. Rescue teams operations where successfully supported by the new radio base station.

http://www.diariodenavarra.es/noticias/navarra/mas\_navarra/2015/06/13/buscan\_m ontanero\_desaparecido\_este\_sabado\_pico\_orhi\_235465\_2061.html

## • Saint James Way emergency network

Over 60,000 thousand people pass every year the Saint Jean Pied – Roncesvalles stage of the St James Way. There is a vertical drop of 1200 meters between the highest and lowest point of the stage and many people especially elderly people are not prepared to such an effort. The weather conditions change drastically from the lowest point at the beginning of the stage to the highest point of the stage many pilgrims are lost or can't finish the way and need to call emergency services for help. But there is not mobile telephony coverage all along the way and some pilgrims have died in their way.

With the improvement of the emergency network coverage in this area the emergency services can operate in case on emergency but the pilgrims don't have the possibility to call. In order to solution this problem some radio and WIFI equipment was installed along the way: the HELPoints. This radio equipment allows pilgrims to call the emergency services. In 2014 two HELPoints were installed in two spots of Saint James Ways stage. In 2015 an additional point was installed.



Figure 4: User interface of the HELPoints

Finally, smaller scale pilot experience of "electronic beacons" was installed along the Saint James Way stage, which accompanied with a mobile app indicates and warns the pilgrims if they are losing the right path. This pilot is in trials and is not in production with real users yet.

#### • Irati emergency network

SAFER project decided to go and step further to what have been compromised in the project in terms of frontier emergency communications. To that purpose a new installment in the Irati Forest was done in the second half of 2015.

For that installment an agreement was reach with local authorities (Aezkoa and Salazar valleys) for them to assume future network exploitation and maintenance.

#### TETRAPOL emergency network extension.

SDIS and Pyrenees Atlantics Department don't have emergency communication competences for network deployment, competences which reside at national level. However, they can complement the network coverage with mobile units which can be transported and installed on demand to improve emergency radio communications in emergency operations.

SDIS acquired one of this mobile unit and did all required testing and validations. This unit was first used in a real operation during the drills of November of 2015.

#### Task 4: Training and awareness

## Task 4 Action 1: Train cross-border Civil Protection organism in joint response Protocols.

"Provide the necessary skills to those individuals tasked with various duties in emergency response according to the Protocols developed."

Cross-border joint training sessions were held between August and October 2015 in various locations. This is the summary of the events:

#### - Visit of SDIS to Navarra Fire Service (8 participants, 5-7 August, Pamplona)

- Explanation of the general organization of the Summer Campaign.
- Operation of the "board of coordination and management" of forest fires.

## - Joint exercises (18 participants, September 9 and 10 in Rontignon, France).

- Water rescue exercise
- Rescue of animals in different scenarios
- Lifting of heavy loads and its behavior during the uprising
- Simulation of a collapse in a building and search for victims.

## - Wild forest fire exercise. (September 25, 8 participants in Ibardin, Navarra)

- Practice coordinating intervention teams specialists forest fires of the two services.
- Introduce operational deployment of the two administrations.
- Know the resources for intervention in extinguishing forest fires in the two services.

## - Mountain rescue joint practice (October 1,10 participants in Carrascal, Navarra).

Participants of SDIS, ANE and "Grupo de Rescate en Montaña de la Guardia Civil". Different mountain rescue maneuvers were done, including helicopter evacuation.



Figure 5: Training sessions

#### Task 4 Action 2: Development of public awareness materials and events.

"Improving the delivery of information to help the public understand potential disasters in Cross Border Area of West Pyrenees and the steps they should take to further protect themselves"

On 16 of October an awareness sessions was held with the participation of local authorities (over 20 majors of the frontier municipalities of both sides) and other representatives of both regional governments.

The organization of civil protection systems of both regions were presented as well as achievements of the project were presented, mainly the (1) improvement of communications in frontier areas (Irati Forest, St James Way, Belagua-Pierre de St Martin etc) as well as (2) joint emergency protocols.

Majors and public representative congratulated regional authorities for SAFER project success and stressed the importance of having coordinated emergency response mechanisms due to the peculiarities of trans frontier areas.

Assistants to the event proposed some improvements and follow up recommendations for future joint initiatives.

http://www.navarra.es/NR/rdonlyres/D98A4C85-CDB6-4EEE-9AFF-23C3A498EC1D/328223/ProyectoSaferPyrenees1.pdf



Figure 6: Awareness session in San Jean Pied de Port

#### Task 5: Simulation exercise

"To verify the effectiveness of the entire (or components of) response protocols"

#### Task 5 Action 1: Plan a simulation exercise.

During the summer of 2015 various meetings and field visits were organized in order to prepare the drill several meetings between representatives of the various departments involved in it (Sdis64, Telecommunications, Fire and civil protection Navarra Navarra). In these preparatory meetings civil protection professionals from both sides:

- Choose simulation area
- Defined simulation scenarios
- Managed permissions required
- Agreed on resources and equipments required
- Prepared and conditioned the drill sites

Joint maneuvers s between the various specialists who were going to be involved in the drill were also performed. These maneuvers were developed among specialists in mountain rescue, search dogs, water rescue, forest fires and search and rescue in collapsed buildings.

The location for the simulation exercise was chosen in Eugui, Navarra, close to the border area. Permits were transacted and simulation scenario was prepared and planned, figuring out the different scenarios in which it could unfold.

The exercise scenarios were focused on cross border critical infrastructure (Eugui dam and surrounding infrastructure) and potential sources of hazards (building in fire, forest fire etc)

The aim of the exercise was getting the emergency-management teams to get to know each other and understand their roles, testing the quickness of decision-making skills etc. Radio communications networks were also tested.

Finally the simulation exercise was planned to be held the 13 and 14 of November 2015 in Eugui and Alduides, just at the border or Navarra and Pyrenees Atlantics.

In November 10, a full day final preparatory meeting was held in Pamplona with 16 troops of the fire departments to close final details of the simulation exercise.



Figure 7: Simulation exercise site

## Task 5 Action 2: Develop a simulation exercise.

Finally the simulation exercise was planned to be held the 13 and 14 of November 2015 in Eugui (Navarra) and Alduides, just at the border or Navarra and Pyrenees Atlantics.

This drill pursued improving the coordination between the two intervening firefighters services, as well as other groups such as police, medical and health personnel, a group of dog handlers, etc.

The specific objectives of the simulation were: (1) knowing the deployment of operatives both fire services, (2) knowing the resources available for each of the interventions and (3) practicing the coordination of the different exercises.

Up to 6 different simulated exercises were developed:

- 1. Simulation of a Forest Fire.
- 2. Collapsed building
- 3. Mountain Rescue
- 4. Urban Fire
- 5. Water Rescue
- 6. Traffic accident











Over 200 hundred effectives were mobilized for the various exercises and over 40 vehicles (land, water and aerial) were mobilized.

Significant coverage and repercussions was observed in local media of both sides of the border:

http://www.navarra.es/home\_es/Actualidad/Sala+de+prensa/Noticias/2015/11/14/simulacro+eugi.htm

http://www.noticiasdenavarra.com/2015/11/15/sociedad/navarra/unos-200-efectivos-de-navarra-y-pirineos-atlanticos-ensayan-su-coordinacion-en-emergencias

http://noticias.anotao.com/link/es/www.diariodenavarra.es/noticias/navarra/mas\_navarra/a/2015/11/14/el gobierno convoca una concentracion este domingo pamplona par a\_condenar\_los\_atentados\_330215\_2061.html

It was especially remarkable the commitment and dedication of the French teams, who despite the Paris terrorist attacks (which sadly happened after the first day of the drill), they decided to continue and move forward with the second day of the simulation exercises, although at some point the possibility of cancellation was raised.



Figure 8: Search and rescue in collapse building exercise

#### **Task 6: Project Management**

"Implement a variety of control mechanism to complete the project successfully, as budget control and management of human capital, communications, resources, quality, and time frames".

## Task 6 Action 1: Task management and follow up

A bi national project management team was established. This PM team prepared the overall project working plan and they have supervised the work done from each of the task teams, controlling the project evolution in time and budget.

Organizational changes in the project partners resulted in changes to the project management team. Fortunately these changes did not adversely affect the development of the project. At any moment during project implementation each of the 3 partners appointed a coordination focal point who was responsible for the realization of activities planned for each of the partners. Overall coordination and reporting was developed by Government of Navarra personnel.

#### Task 6 Action 2: Report to EC

Interim reports were prepared in the form and time, in accordance with the commitments in the project Agreement.

Due to several contingencies and financial accounting delays the Final Report of the project, which should have been prepared and sent by the 1st of March, experienced delays in its realization.

Project partners produced reports by their own means with not subcontracts required.

#### **Task 7: Tasks Publicity**

"Project results publication"

## Task 7 Action 1: Web Development.

Initially, the existing ANE web site was used to publish the Safer Pyrenees project. The following links show the published information.

http://www.navarra.es/NR/rdonlyres/18791ECB-70A0-416B-A9C0-F49EE1266C73/280429/SAFERPYRENNES.pdf

http://www.navarra.es/home\_es/Actualidad/Sala+de+prensa/Noticias+de+segurida d+publica/2014/03/13/navarra+pirineos+atlanticos+coordinacion+atencion+emergencia s+safer+pyrenees+consejero+morras.htm

http://www.navarra.es/home\_es/Gobierno+de+Navarra/Organigrama/Los+departamentos/Presidencia+justicia+e+interior/Organigrama/Estructura+Organica/ANE/

Then, in 2014, In 2014 a draft Project web site was released. In this site Project description, progress, video and news were published. <a href="http://yblancor.wix.com/safer">http://yblancor.wix.com/safer</a>

In June 2015, this web site was migrated to a Government of Navarra official web site, where it could be guaranteed a greater level of visibility, security and sustainability.

http://internet.gccpublica.navarra.es/DGIT/SAFER/default.aspx

#### Task 7 Action 2:.workshop, seminars, conferences

Two project engineers from Government of Navarra and ANE were invited to the world's leading conference and exhibition dedicated to critical communications: "Critical Communications World". This conference held in Barcelona in May 2015 joined 4000+ professionals, 175+ exhibitors, 200+ expert speakers from 120+ countries.

Our two speakers presented the emergency communication network of the Government of Navarra with special explanation of SAFER project and actions developed with SDIS in Pyrenees Atlantics to reinforce border communications and joint communications.

http://criticalcommunicationsworld.com/

## Task 7 Action 3: production of brochures, films, etc

A video project was filmed during the all the project cycle. Intermediate versions of this video were projected in different internal and external project events, as the workshop with majors in October 2015. A final version, including 2 videos, was produced at the end of the project.

Video 1 – Project baseline situation and needs <a href="https://youtu.be/\_GCzH8FORs">https://youtu.be/\_GCzH8FORs</a>

Video 2 – Project Actions and result

https://youtu.be/06\_GlqY6fWs

Project brochures and handouts with joint protocols were printed and handed in coordination and awareness events.

## Task 7 Action 4: media publicity

Project's kick off was published in the main local newspapers, and media coverage was obtained during all the project life. Later political meeting in Pau had media repercussion too.

Special mention to all the actuations that SAFER project has accomplished in the Saint James Way, those had had very good media coverage. This is pilgrims route has over 60 thousand visitors per year coming from all over the world, and every year there are emergency situations which create social repercussion and alarm, as the one previously mentioned.



Figure 9: HELPoint media coverage

Finally, the drill held in November of 2015 had extraordinary local media repercussion in both regions.



Inicio > Sociedad > Navarra

EN EL MARCO DEL PROYECTO SAFER PYRINEÉS

## Unos 200 efectivos de Navarra y Pirineos Atlánticos ensayan su coordinación en emergencias

Durante dos días han realizado un simulacro de terremoto en Quinto Real D.N. - Domingo, 15 de Noviembre de 2015 - Actualizado a las 06:07h



Figure 10: Simulation exercise media coverage

#### 5. Presentation of the technical results and deliverables

Below we have the list of the results achieved by the project in terms of the deliverables obtained.

#### Deliverable 1 – Scenarios on emergency situations and disasters.

To this respect, an after having shared between regions the available documentation regarding their risks, it was proposed and agreed to develop a detail analysis of existing flood monitoring and early warning system in the border area in Navarra, a detected weak point.

This study clearly showed with empiric data the weaknesses of existing monitoring and alert system, and concluded in the need of improving existing automatic meteorological stations network, as well as developing a specific alert system tailored for the Civil Protection which incorporates hydro meteorological simulated models.

This product was developed satisfactorily with the purpose of improving fast flooding early warning in the border area, a major problem identified during the first phase of the project. This study was presented and handed to the main responsible of civil defense system in Navarra, in order to mobilize future investments in system improvement.

#### Deliverable 2 – Common databases of risk maps, resources and infrastructures

This deliverable consisted in completing and sharing of the GID data from the two emergency services in order to visualize all the risk, resources and infrastructure of the cross border area.

To improve emergency response is important to have all available information. In border areas, where two countries will act simultaneously, is important for the coordination of the actions to have common and full territorial, resources, and infrastructure and risk information. At present, each emergency coordination centre has additional information about of the cross border area, information that was not available at the beginning of the project.

Additionally, a formal Agreement document to three parts was produced and signed. The signatories of the Agreement are the Government of Navarra, the SDIS and the Platform of Mutualised Geographic Information of Aquitaine. This agreement provides a framework to interchange GIS information between Navarra and Pyrenees Atlantics, and includes The conditions for the exchange of geographic files described between partners.

- The general conditions for granting rights to use the files made available
- The obligations of the partners, in turn, owner and user.

We consider the signature of this Agreement a success and a best practice that can be capitalized in other regions.

#### Deliverable 3 – Protocols to improve coordinated emergency response.

Finally, by the end of the project 7 joint protocols were produced, edited and distributed:

- Coordination CODIS CECOC (emergency coordination centers).
- Meteorological Alerts

- Wild fires
- Collapsed structures
- Foreseeable risk in large concentrations
- Multi-incident emergencies
- Mountain rescue

Although this kind of protocols exist in many other European regions, these protocols could be transferred as a reference for other neighboring regions of two different state members.

This experience deepened relations between the civil protections of both regions. In fact, new joint actions, and new protocols between the two actors are being made in 2016.

## Delivery 4 - Emergency communications technical projects.

Several emergency telecommunications projects where elaborated:

- TETRA networks extension in border areas (Abodi, Larraun and Zampori)
- HELPoints in Saint James Way (3 sites).
- HELPoints in Irati Forest (4 sites).
- TETRAPOL Mobile Unit.

TETRA and TETRAPOL projects were done by the own technicians of Government of Navarre and SDIS, while for the HELPoints projects subcontracting was required.

#### Delivery 5 - Emergency communications network deployments.

#### 1 TETRA network extension

The installation of 3 TETRA base stations in the selected areas has concluded successfully. Today the network has three new base stations to enhance radio communications in border area. Two of them were installed in existing telecommunications centers (Larrun and Zampori).



Figure 11: Larrun and Zamporin base stations

The third Base Station is being installed in Abodi. It was necessary the reconditioning of an existing infrastructure (hunting lodge) for the housing of the equipments.



Figure 12: Abodi base station with solar panels located over Irati Forest

## 2 Saint James Way emergency network

Respecting the HELPoints installed in Saint James Way in 2014 and 2015 as a Pilot, intense utilization of the WIFI by pilgrims has been observed (over 50 different users in the busiest days). And the emergency radio that was extended in the area has been use in various emergencies during the last month. One of these rescues had special media coverage due to the adverse weather conditions and the size of the rescue operation developed.

(<u>http://www.eitb.eus/es/noticias/sociedad/detalle/3896842/rescate-ibaneta-rescatan-dos-peregrinos-camino-santiago/</u>)

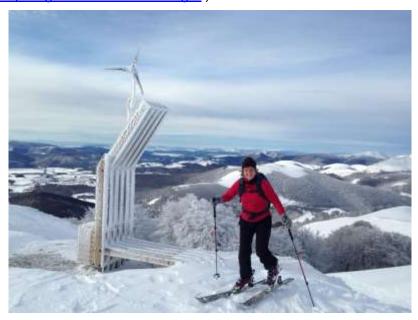


Figure 13: HELPoint in Saint James Way

On the negative side with the HELPoints pilot was the problems experience with functioning in the coldest days of winter, when the systems went down due to lack of energy (frozen aero generator). Technical workarounds are to be developed for next winter.



Figure 14: HELPoint in Saint James Way

## 3 Irati emergency network

The network installed comprise the following service points:

- HelPoint in Arrazola (entry of Irati Forest park). This element includes radio communications and WIFI connection.
- HelPoint in Presa de Irati including only WIFI connection.
- HelPoint in Casa Maximino (inside Irati Forest park). This element includes radio communications and WIFI connection.
- HelPoint Casas Irati (main entry of Irati Forest park). This element includes radio communications and WIFI connection.

Additionally TETRA 6 radio sets were provided to guards at both entrances of Irati Forest for effective communications.



Figure 15: HELPoint in « Casas de Irati» park entrance

## **Delivery 5 - TETRA-TETRAPOL Gateway**

Interconnection solutions where analyzed and a final solution was agreed between technical personnel of partners. SDIS acquired the equipment to implement the interconnection solution and installed in both ends.

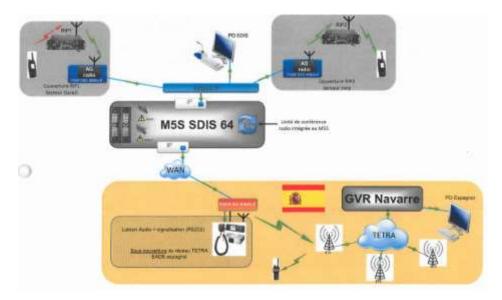


Figure 16: Interconnection solution

Up to date, both teams have been able to implement a fully operational solution. Efforts have been retaken in recent weeks, and is expected a fully functional solution in the summer of 2016.

## Delivery 6 - Frequency plans and cross-border communication protocols

Waiting for the interconnection solution to be fully operational, both ANE and SDIS agreed in a frequency group and communications protocol for trans-border radio communications.

#### **Delivery 7 - Memories of training sessions.**

All joint training sessions were documented and lessons learnt systematized. New joint training sessions have been planned for 2016 beyond the scope of the project.

#### Delivery 8 - Public awareness materials.

3 brochures in Spanish, French and Basque have been produces in the project:

- · Auto protection in case of wild fire
- What to do in case of an earthquake
- Meteorological Alerts. What to do.

#### **Delivery 9 - Memories of public awareness events.**

A memory of the awareness event with Majors of both regions was produced-

### Delivery 10 - Simulation exercise plan.

A detail drill plan was elaborated before the simulation exercise. This document included exercise's objectives, the description of scenarios and resources required.

#### **Delivery 11 - Simulation exercise final report.**

A comprehensive report was produced after the simulation exercise describing the 6 exercises that were developed:

- Simulation of a Forest Fire.
- Collapsed building
- Mountain Rescue
- Urban Fire
- Water Rescue
- Traffic accident

#### Delivery 12 - Annual work plans 2014

Annual work plans were elaborated in March 2014 and March 2015.

## **Delivery 13 - Web Page**

Initially, the existing ANE web site published Safer Pyrenees project's information:

http://www.navarra.es/NR/rdonlyres/18791ECB-70A0-416B-A9C0-F49EE1266C73/280429/SAFERPYRENNES.pdf

http://www.navarra.es/home\_es/Actualidad/Sala+de+prensa/Noticias+de+seguridad+publica/2014/03/13/navarra+pirineos+atlanticos+coordinacion+atencion+emergencias+safer+pyrenees+consejero+morras.htm

http://www.navarra.es/home\_es/Gobierno+de+Navarra/Organigrama/Los+departamentos/Presidencia+justicia+e+interior/Organigrama/Estructura+Organica/ANE/

Project web site in Government of Navarra's official web site.

http://internet.gccpublica.navarra.es/DGIT/SAFER/default.aspx

#### **Delivery 14 - Film**

Video 1 – Project baseline situation and needs

https://youtu.be/ GCzH8FORs

Video 2 – Project Actions and result

https://youtu.be/06\_GlqY6fWs

#### **Delivery 15 – Media repercussion**

The project launch was published in the main local newspapers. A link to the online version can be found here:

http://www.diariodenavarra.es/noticias/navarra/mas\_navarra/2014/03/13/pirineos\_atlanticos\_navarra\_mejoraran\_atencion\_emergencias\_151196\_2061.html

http://www.noticiasdenavarra.com/2014/03/14/sociedad/navarra/navarra-y-francia-refuerzan-la-coordinacion-para-atender-emergencias-en-los-pirineos

Project political meeting, that was held in Pau in June 20014, had also media repercussion in the same two regional newspapers:

http://www.noticiasdenavarra.com/2014/08/06/sociedad/navarra/navarra-y-pirineos-atlanticos-abordan-la-seguridad-del-camino-de-santiago

http://www.diariodenavarra.es/noticias/navarra/mas\_navarra/2014/08/06/a\_estudio\_se quridad\_etapa\_san\_juan\_pie\_puerto\_roncesvalles\_170332\_2061.html

Additional repercussion in local newspapers during mid project:

http://www.europapress.es/turismo/turismo-verde-noticias/noticia-peregrinos-santiago-dispondran-nuevo-punto-comunicacion-112-collado-lepoeder-20140917143438.html

http://www.diariodenavarra.es/noticias/navarra/mas\_navarra/2014/09/17/los\_peregrinos\_tendran\_nuevo\_punto\_comunicacion\_con\_112\_175657\_2061.html

Finally, media repercussion in local newspapers in the final semester of the project:

http://www.navarra.es/home\_es/Actualidad/Sala+de+prensa/Noticias/2015/11/14/simulacro+eugi.htm

http://www.noticiasdenavarra.com/2015/11/15/sociedad/navarra/unos-200-efectivos-de-navarra-y-pirineos-atlanticos-ensayan-su-coordinacion-en-emergencias

http://www.noticiasdenavarra.com/2015/11/15/sociedad/navarra/unos-200-efectivos-de-navarra-y-pirineos-atlanticos-ensayan-su-coordinacion-en-emergencias

http://www.navarra.es/home\_es/Actualidad/Sala+de+prensa/Noticias/2015/10/16/Proyecto+Safer+Pyrenees.htm

http://www.navarra.es/home\_es/Actualidad/Sala+de+prensa/Noticias/2014/09/17/peregrinos+camino+santiago+punto+comunicacion+112+sos+navarra+wifi+collado+lepoeder+pirineos+atlanti.htm

http://www.navarra.es/home\_es/Actualidad/Sala+de+prensa/Noticias+de+seguridad+publica/2015/07/05/Entrenamiento+conjunto.htm

http://www.navarra.es/home\_es/Actualidad/Sala+de+prensa/Noticias+de+seguridad+publica/2016/03/15/rescate+peregrinos+bici+izandorre.htm

http://www.navarra.es/NR/rdonlyres/D98A4C85-CDB6-4EEE-9AFF-23C3A498EC1D/328185/SAFERSaintJeanR.pdf

http://www.euskaditecnologia.com/roncesvalles-y-la-selva-de-irati-tendran-conexionwifi/

http://www.eitb.eus/es/noticias/tecnologia/detalle/3551160/roncesvalles-selva-irati-incluiran-zonas-wifi/

http://pamplonaactual.com/la-zona-de-roncesvalles-y-la-selva-del-irati-contaran-conzonas-wifi-dentro-del-proyecto-safer-pyrenees/

http://www.eitb.eus/es/noticias/sociedad/detalle/3896842/rescate-ibaneta-rescatan-dos-peregrinos-camino-santiago/

http://foroperegrinos.com/viewtopic.php?t=335698&p=340108 http://www.caminosantiago.org/cpperegrino/comun/..%5Cprensa%5Cverprensa.asp?PrensalD=8842

http://www.20minutos.es/noticia/2210701/0/navarra-pirineos-atlanticos-abordan-seguridad-etapa-san-juan-pie-puerto-roncesvalles/

http://www.gronze.com/actualidad/nuevas-medidas-para-aumentar-seguridad-enetapa-saint-jean-pied-port-roncesvalles-2411

http://www.navarra.es/NR/rdonlyres/D98A4C85-CDB6-4EEE-9AFF-23C3A498EC1D/328223/ProyectoSaferPyrenees1.pdf

http://www.pirineo.com/noticias-pirineo/navarra-pirineos-atlanticos-abordan-seguridad-camino-santiago

#### 6. Evaluation of the technical results and deliverables

#### General lessons learnt

Emergency preparedness and response is all about people who know how to react in a crisis situation. In this context, the most positive aspect of SAFER project is that it has provide a platform to civil protection teams from Navarra and Pyrenees Atlantics to better know each other and to work together.

Beyond the project actions, personal relationships and mutual understanding developed during the project are an asset in itself. These relations have already proved its value in real life situations where trans border cooperation was required.

### Challenges and/or improvements to be tackled through further action

• Emergency Communications

As mentioned, interconnection solution between emergency radio systems from both sides is not fully functional. SDIS and ANE have prioritized this action.

Training and awareness

After the emergency situations held in Saint James Way this winter, SDIS an ANE have agreed in re defining the joint response protocol for this area and preparing a joint exercise in September this year.



http://www.noticiasdenavarra.com/2016/03/08/sociedad/navarra/video-asi-fue-el-rescate-de-la-peregrina-herida-en-ibaneta

#### Recommendations to stakeholders

Recommendation 1: the Government of Navarra should invest in improving its fast flooding early warning systems in the north basins, those of the rivers coming from the Pyrenees. Those basins do not have enough hydro meteorological measuring elements and the basins are not modeled to permit fast alerts to the population.

Recommendation 2: ANE should improve its Collapsed Structure Search and Rescue (CSSR) capabilities, both with training and equipment. Further joint training actions with SDIS would be interesting for ANE.

Recommendation 3: both ANE and SDIS should continue the efforts to write and update joint response protocols for operations in border areas, as well as joint exercises and training sessions.

## 7. Follow-up

Preparedness is achieved and maintained through a continuous cycle of planning, organizing, training, equipping, exercising, evaluating and taking corrective action. Ongoing preparedness efforts among all those involved in emergency management and incident response activities ensure coordination during times of crisis. Moreover, preparedness facilitates efficient and effective emergency management and incident response activities. Specifically these actions must be continued or maintained.

These are the follow up actions that were planned at the beginning of the project and its actual status:

#### • Maintain and update the joint Response Protocols

While this joint response protocols are already operational, for them to be official for Pyrenees Atlantics, SDIS is still developing the bureaucratic process for these protocols to be officially endorsed by national authorities.

## • Maintain and update the databases and GIS interface

An Agreement document was signed as a framework to interchange GIS information between Navarra and Pyrenees Atlantics. It includes:

- The conditions for the exchange of geographic files described between partners.
- The general conditions for granting rights to use the files made available
- The obligations of the partners, in turn, owner and user.

To assure the follow up of this action, the Agreement establishes doing the interchange of GIS data annually.

#### • Further improvement of Emergency Communications in border area.

Based on the success of pilot project deployed In June, there was a joint meeting in June 2016. In this meeting, among other issues, it was proposed to further improve the communications in Saint James Way stage which goes from San Jean Pied de Port to Roncesvalles.

#### • Further common training sessions

It has been planned to do a joint exercise in Saint James Way in September 2016. Additionally SDIS has invited has invited ANE to visit Bayonne festivals to know the emergency operative deployed for the occasion. It has been agreed having at least one joint training event per year.

#### • Maintain and update public awareness documentation.

No follow up measures have been planned at the moment regarding public awareness documentation.