



Fire and Rescue Service
ANNUAL ACTIVITY REPORT
2022

 **Bizkaia**
suhiltzaileak

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Executive Summary

Some figures

During 2022, the total number of call-outs made by the Bizkaia Fire and Rescue Service (SPEIS) rose to 6,429, compared to the 5,692 call-outs made in 2021 (which represents an increase of 12.94%). This has been the year with the most call-outs recorded in the SPEIS over the last 10 years.

The station with the highest number of call-outs was Urioste (2,007 call-outs, 31% of the total number of recorded call-outs and surpassing the barrier of 2,000 call-outs for the first time), followed by Artaza (1,217) and Basauri (996). The station with the fewest call-outs was Markina-Xemein (232). All the stations have seen an increase in the number of call-outs compared to the previous year.

In terms of the type of action, in 2022 the call-outs have been distributed in a proportional way: 2,035 fires (32% of the total call-outs), 2,185 rescues (34% of the total) and 2,209 technical assistance (34% of the total).

The municipality in which the most interventions have been carried out has been Barakaldo (644 call-outs), followed by Getxo (476), Portugalete (353), Santurtzi (281) and Basauri (220). These are the five municipalities with the largest population in the Historical Territory of Bizkaia, excluding Bilbao, which has its own municipal service and is not served by this SPEIS.

The other ten municipalities in which the most interventions have been carried out were Galdakao, Erandio, Leioa, Sestao, Durango, Valle de Trápaga-Trapagaran, Amorebieta-Etxano, Mungia, Gernika-Lumo and Bermeo. In 14 of these 15 municipalities, there have been more than 100 call-outs.

In another 16 municipalities the number of recorded call-outs has been between 50 and 99. In 55 municipalities, between 10 and 49 call-outs have been made. And in another 26 municipalities, less than 10 call-outs have been made. It should be noted that during 2022 there has not been any municipality in Bizkaia where no intervention of any kind has been recorded.

Regarding the interventions in relation to the number of inhabitants, the average for the population served was 7.94 call-outs per 1,000 inhabitants.

The highest number of call-outs have been recorded in the months of summer and early autumn (June-October).

The day with the most interventions in 2022 was 23 October (49 call-outs), when a large number of technical assistance call-outs coincided due to strong winds and several wildland fires, including the one that burned almost 500 hectares in the municipalities of Zalla and Balmaseda.

There were also a high number of interventions on 1 January (45 call-outs, partly due to fires associated with the New Year celebrations), and on 31 December (40 call-outs, many due to strong winds).

In 2022, three people died in fires attended by the SPEIS: a woman who died in March in the fire at her house in Barakaldo and two men who died in August during the burning of plant remains in Basauri.

An innovative, sustainable emergency service open to the public

The Bizkaia Provincial Council is committed to modern and innovative administration, with- in the organisation itself and in its relations with the territory, placing citizens at the centre of the actions to be carried out in order to respond to the different social challenges. And the services to people also involve providing agile and effective responses to emergencies, offering the citizen the best possible emergency service.

In this regard, the Directorate of Emergency Management and Civil Protection is and will continue working to make the regional emergency service a benchmark service due to its innovative nature and the use of cutting-edge technology.

In this regard, the identification of new technological improvements is a continuous and ongoing task within the service. And this work is carried out within a context of open inno- vation where the team's reflection on the need to innovate in their processes and activities is encouraged, identifying spaces for improvement and change to take advantage of the opportunities offered by the new digital reality.

In this context of open innovation, the service is working on an innovative GOVTECH pilot project that aims to monitor the equipment carried by the service trucks in real time using RFID technology in order to facilitate the daily checks that must be carried out by the fire- fighters and logistics management. Given the difficulties of the project, since the trucks have equipment that is difficult to read with existing technology, it has been decided to car- ry out the project in phases until a technology is developed that allows the most compre- hensive reading of the truck's equipment in order to reliably and robustly monitor it. The project will therefore continue in the areas of the truck that currently offer a reliable level of reading with the existing technology. More specifically, work will continue on achieving lo- gistical control of the cab equipment, which in turn will allow real-time communication of the identifiers relating to the people involved who are in the truck cab. At the same time, work will continue on the remote monitoring of truck water and foam levels through Can Bus systems.

The service is also studying the possible application of the concepts learned from the GOVTECH project for the digitisation of the SPEIS central warehouse (stock control and equipment maintenance).

We are committed to an innovative but also a sustainable service. With this in mind, the first step has been taken. This involves preparing a "Plan to be a sustainable emergency service"

with a time frame of three years (2022-2024), a plan that aims to involve and impact all areas of the regional emergency service, with this being the first emergency service, at the state level, that has a specific plan with these characteristics. The plan defines thirteen actions structured around three pillars: ecology, society and prosperity.

Within the framework of this plan, one of the proposed actions on which we are already working is the remodelling and improvement of the sustainability of the Ispaster training area, to make it a benchmark centre dedicated to training in fire protection in particular and to emergency services in general.

Finally, the service also aims to make the data it has freely available to the public in reusable formats and without restrictions regarding its conditions of use. For this reason, since 2021, in collaboration with the Directorate of Good Governance and Transparency of the Bizkaia Provincial Council, the service has published the main information for the interventions attended in Open Data. This is available at www.opendatabizkaia.eus and is updated quarterly.

Investments made in the service

In 2022, in order to offer a better service to citizens in emergency situations, the Directorate of Emergency Management and Civil Protection had a budget of €2,761,888.94 for investment.

On 31 March 2022, the new Arratzu fire station was inaugurated, which will serve a population of around 46,200 people in about twenty municipalities in Busturialdea-Urdaibai. The new station, located in the Barrutia neighbourhood next to the BI-2238 Gernika-Arteaga road, has state-of-the-art facilities and a special design adapted to the natural environment in which it is located. It replaces the Gernika station, the oldest in operation of the eight that make up the Fire and Rescue Service of the Bizkaia Provincial Council. The new Arratzu station is built on a 6,150 m² plot of which 2,100 m² are occupied by the new building. The Bizkaia Provincial Council has invested 6.5 million euros in the construction of this new station.

In addition, other improvements have been made in the stations at a cost of €1,176,800.

In 2022, a heavy forestry pumper was also acquired for an amount of €398,065, and the acquisition of more precise and safer equipment and materials has continued, in order to continue providing the best possible service.

Finally, improvement work has been carried out on several heavy urban pumpers and various utility vans in order to homogenise and standardise the distribution of equipment in service vehicles.

Consolidation of the Bizkaia Prest dispatching centre with the integration of the Provincial Department of Sustainability and the Natural Environment and the constant development of new applications

Progress has been made in the rolling out of the Bizkaia PREST model, incorporating it into the Forestry Service of the Department of Sustainability and the Natural Environment, and improving coordination with the Provincial Services of Public Works and Highways.

Continuous work also continues on the implementation of new technological developments that allow the improvement in the management of the Bizkaia PREST centre, through the integration of signals from other regional agencies and hardware to support interventions, making the technological platform that supports the centre more robust, reliable and independent.

People

In terms of people, the General Directorate of Emergency Management and Civil Protection of the Bizkaia Provincial Council has a staff of 439 people (including the management), after a total of 54 new career civil servants joined the service in 2022: 3 deputy inspectors; 1 corporal and 50 firefighters. The Bizkaia PREST Integrated Emergency Management Centre has also seen its workforce increase from 15 to 18 emergency operators. At the same time, a total of 11 staff losses due to retirement have been recorded: 1 administrative staff, 1 sergeant, 1 sub-officer, 4 corporals and 4 firefighters.

Awareness raising, training and advice to companies

One of the tasks of the Prevention, Training and Civil Protection Section is advising, resolving queries and writing technical reports related to prevention and compliance with fire safety regulations. These tasks are mainly carried out for other administrations, companies and, exceptionally, for private technicians. More specifically, 22 technical reports have been produced at the request of institutions. Several technical queries from private individuals have also been answered.

With regard to citizen awareness, in 2022 citizen awareness and training campaigns that address the daily risks that citizens face have been carried out via radio, social networks and through the distribution of brochures and posters.

A citizen training campaign has been designed on “how to prevent and how to act in the event of a fire”, by placing informative posters in lifts throughout Bizkaia. This campaign will run throughout the year 2023.

The European project “Be Fire Safe at School” has also been brought to a close. The pedagogical contents for all the presentations and didactic videos aimed at education in fire protection have been completed and the online application has been ready and available free of charge to the entire group of secondary school teachers and students, translated into seven languages, including Basque and Spanish.

The “Órbita Laika” scientific programme on TVE2 invited us to participate in the recording of a programme dedicated to fire, in which we were able to disseminate the basic principles to minimise the effects of a fire. It was broadcast nationwide on 11 October 2022.

This year, after the pandemic, it has been possible to bring back the fire stand in the Christmas Children’s Park, this being one of the most visited of the institutional attractions and, without a doubt, one of the most highly valued.

1. Introduction

The Bizkaia Provincial Council makes a considerable effort to provide good public services that are in line with the needs of a developed society such as Bizkaia. The safety of people, property and the environment when faced with emergencies of natural, technological or anthropogenic origin is a basic asset for the development of human activities. This is the understanding of our institution and for this reason it has allocated 34.2 million euros to the Provincial Emergency and Civil Protection Service; a considerable amount of public money that must be used efficiently by the people who make up this organisation.

Carrying out the necessary tasks to ensure safety in Bizkaia requires management, leadership and people – especially people – with a high level of commitment. Without this, it is impossible to provide the best possible service with the means and resources that we have available.

Our mission has been, is and will be unchanging over time, and it is none other than to minimise damage to people, property and the environment, by preventing and intervening where necessary, in the face of natural, technological and/or anthropic risks. However, what does vary constantly are the necessary means and resources and the way of managing our organisation. We are required to be up to the task of knowing how to do it and, furthermore, in doing it well. This requirement changes over time and it is clear that what was required of us 30, 20 or 10 years ago, for example, was not the same as what is currently required of us. For this reason, the organisation has to be undergoing continuous change to adapt to a demand that is always growing.

Stress is always placed on our vocation to be a benchmark service. Among other things, this means: prioritising the safety of our personnel in risk situations in which they must intervene; having educated and well-trained personnel; promoting the culture of the self-protection of the people who live, work or visit Bizkaia to the greatest possible extent; having sufficient, modern and reliable equipment; having studied, planned and implemented the necessary procedures to be able to act in risk situations; efficiently managing the means and resources assigned to us; regarding sustainability as another central aspect in the management of the service and having digital tools that allow us to better carry out our tasks.

We do not believe it is necessary to expand on our above-mentioned basic management structure because you will find them described in detail in this report for the 2022 financial year. However, we would like to highlight the fact that all this cannot be achieved without the commitment of the people who make up the organisation, starting with the positions of responsibility and ending with any of the other people who make up our organisation, whether or not they are in uniform. This is a job done by everyone, each in the position that they occupy.

Our society has a good opinion of us and shows a high degree of satisfaction with the service we provide, which motivates us and encourages us to continue working to be an

Emergency Service that is a little better every day. This has been achieved thanks to all the people who make up our organisation and to the Bizkaia Provincial Council itself, the institution to which we belong and that helps us carry out our tasks.

Moving on to the report data itself, it can be seen that society is clearly recovering pre-pandemic activity and this results in a greater number of call-outs, since common sense and experience show us that over sufficiently long periods of time, their number is always directly proportional to the size of the population served and to the activities of all kinds that are carried out in our historical territory. We will not go into figures in detail as they are included in this report. We would just highlight two points. The number of call-outs has grown by approximately 13%. It is worth mentioning that this growth affects all our stations and especially the Urioste station (Ortuella) which for the first time has exceeded 2,000 call-outs/year.

Points to note about the management of our organisation include: we continue working on open innovation projects that are an essential driving force for improvement; we practice transparency by publishing the data for the interventions on www.opendatabizkaia.eus on a quarterly basis; through a process of strategic reflection we have defined and started the refurbishment of our Ispaster Training Area, a project that will occupy us for the next few years.

Regarding our regional emergency management centre, Bizkaia Prest, we would comment that it continues to incorporate new applications and strengthen the existing ones. It was created with the aim that it would grow by incorporating more activities, because the technological platform and its human resources make this possible.

In summary, despite being an interested party, our impression is that everyone has done a lot of work and has generally done it well during the last year, 2022, and that this encourages us to continue to pursue our goal of being an emergency service that gets better every day.

Finally, we cannot end this introduction without welcoming all the people who have joined our organisation during 2022. We would also like to offer the warmest thanks to everyone who, due to retirement or other reasons, has left us in 2022, for all their work over the years, in some cases for a lifetime in the service. And finally, we offer our sincere thanks for the commitment and the good work carried out by all the people who make up this organisation.

Eskerrik asko benetan!!!

Bizkaia, 15 February 2023

The Director

2. Organisation

The Directorate of Emergency Management and Civil Protection is made up of the Fire and Rescue Service (made up of the Station Operations and Management section and the Prevention, Training and Civil Protection section), a technical-administrative section and the section of the Integrated Emergency Management Centre – Bizkaia Prest.

To deal with emergencies/incidents that occur in Bizkaia, except for Bilbao, which has its own service, there is a network of fire stations based on the principle of being able to access the area of any municipality in Bizkaia in a maximum theoretical response time of 20 minutes and no more than 30 minutes, even in the most unfavourable conditions. Theoretical response time is understood to be the time from when the request for an intervention enters Bizkaia Prest until the first operational resource is in place, under normal traffic and operating conditions of the stations.

Currently, with the provision of existing stations, it is guaranteed that the theoretical response time is less than or equal to 20 minutes for 91.12% of the population served by this service, which is 804,957 people, according to population data from the year 2022, which are the latest published figures. If it is taken into account that in the border areas with Araba and Gipuzkoa there are agreements with the Fire Service that might arrive earlier, even if it is outside its territorial area of competence, this percentage rises to 91.45%.

2.1. Stations in the SPEIS

The Bizkaia Fire and Rescue Service (hereinafter SPEIS) is made up of eight fire stations and professional firefighters distributed throughout all the regions of Bizkaia, along with a training area in Ispaster. The stations are distributed over four areas:

AREA 1	FENIX 1 – Urioste Station (Ortuella)
	FENIX 6 – Zalla Station
AREA 2	FENIX 2 – Basauri Station
	FENIX 5 – Arratzu Station
AREA 3	FENIX 3 – Artaza Station (Leioa)
	FENIX 8 – Derio Station
AREA 4	FENIX 4 – Iurreta Station
	FENIX 7 – Markina-Xemein Station

Additionally, SPEIS has agreements with five Civil Protection volunteer groups from the municipalities of Lanestosa, Urduña/Orduña, Karrantza Harana/Valle de Carranza, Bermeo and Otxandio.

Below is a detailed breakdown of the eight fire stations that make up the Bizkaia Fire and Rescue Service.

Urioste Station



This is the central station of the service, where, in addition to the station itself, administrative services, logistics, vehicles, the emergency coordination centre (Bizkaia Prest) and the SPEIS headquarters are located.

It is located in the Urioste neighbourhood (Ortuella) and covers the following municipalities:



Municipality	Km ²	Inhabitants ¹
Barakaldo	24.3	100,535
Portugalete	3.2	44,800
Santurtzi	7.2	45,749
Sestao	3.5	27,533
Valle de Trápaga-Trapagaran	13.1	11,918
Abanto y Ciérvana - Abanto Zierbena	18	9,369
Ortuella	7.7	8,466
Muskiz	20.8	7,367
Alonsotegi	16	2,960
Zierbena	9.2	1,485
TOTAL	123	261,243

The station workforce consists of 60 firefighters, 12 corporals, 3 sergeants and an area deputy inspector, also responsible for the Zalla station.

Additionally, in the central services there are 5 administrative staff, 4 maintenance assistants, a technical engineer responsible for the vehicle area, 18 operators and emergency centre operators, a Bizkaia Prest section chief, a head of the technical-administrative section, seven deputy inspectors, three officers, a head of the Prevention, Training and Civil Protection section, a head of the Station Operations and Management section and the Deputy Director of Emergency Management and Civil Protection.

¹ The population data in all the tables are those provided by the INE for the year 2022

Zalla Station



The Zalla Station, inaugurated in 2021, is the station covering the following municipalities:



Municipality	Km ²	Inhabitants
Zalla	30.8	8,416
Balmaseda	22.3	7,651
Güeñes	41.2	6,699
Karrantza Harana/Valle de Carranza	137.7	2,759
Sopuerta	42.8	2,638
Gordexola	41	1,723
Galdames	44.5	842
Artzentales	36.7	726
Trucios-Turtzioz	31	502
Lanestosa	1.2	261
TOTAL	429.2	32,128

The station workforce is made up of 30 firefighters, 6 corporals and 3 sergeants.

Basauri Station



Located in a strategic communications hub in Basauri, it is the station covering the following municipalities:



Municipality	Km ²	Inhabitants
Basauri	7.2	40,324
Galdakao	31.7	29,285
Arrigorriaga	16	11,954
Etxebarri	3.3	11,780
Ugao-Miraballes	5.2	4,128
Urduña/Orduña	23.5	4,166
Igorre	17.3	4,330
Lemoa	15.8	3,530
Orozko	102.7	2,664
Zaratamo	10	1,628
Larrabetzu	21.5	2,049
Zeanuri	67	1,271
Dima	61.8	1,454
Areatza	9.1	1,249
Zeberio	47.1	1,084
Bedia	16.5	1,102
Arrankudiaga-Zollo	22.8	1,008
Artea	12.4	746
Arantzazu	3.8	401
Ubidea	2.9	164
Arakaldo	2.6	158
TOTAL	500.2	124,475

The station workforce consists of 42 firefighters, 6 corporals, 3 sergeants and an area deputy inspector, also responsible for the Arratzu station.

Arratzu Station



The Arratzu station, inaugurated in 2022 to replace the old Gernika station, currently serves the following municipalities:



Municipality	Km ²	Inhabitants
Gernika-Lumo	8.6	16,855
Bermeo	34.1	16,755
Mundaka	4.2	1,866
Busturia	19.6	1,677
Muxika	50	1,483
Forua	8	910
Gautegiz Arteaga	13.6	866
Ea	14.2	824
Ibarangelu	15.6	680
Errigoiti	16.4	504
Elantxobe	1.9	349
Ajangiz	7.3	480
Morga	11.5	422
Kortezubi	12	441
Arratzu	10.3	432
Mendata	22.4	393
Sukarrieta	2.3	361
Ereño	10.7	267
Murueta	5.4	327
Nabarniz	12.2	261
TOTAL	280.3	46,153

The station workforce is made up of 30 firefighters, 6 corporals and 3 sergeants.

Artaza Station



This is the station that serves Uribealdea and is located in the Artaza neighbourhood (Leioa).



Municipality	Km ²	Inhabitants
Getxo	11.9	76,365
Leioa	8.5	32,172
Erandio	18	24,446
Sopela	8.4	14,365
Berango	8.8	7,347
Gorliz	10.2	6,031
Plentzia	6.3	4,376
Urduliz	7.8	5,247
Barrika	7.8	1,547
TOTAL	88	171,896

The station workforce consists of 48 firefighters, 6 corporals, 3 sergeants and an area deputy inspector, who also supervises the Derio station.

Derio Station



The Derio station is located at a strategic point in order to quickly access all the municipalities in its coverage area:



Municipality	Km ²	Inhabitants
Mungia	54.8	17,662
Derio	7.4	6,819
Sondika	6.3	4,521
Zamudio	18.1	3,256
Loiu	15.3	2,318
Lezama	16.5	2,477
Bakio	16.8	2,812
Gatika	17.2	1,642
Gamiz-Fika	15.5	1,391
Laukiz	8.1	1,227
Lemoiz	14.3	1,314
Maruri-Jatabe	15.8	1,036
Arrieta	14.5	576
Meñaka	12.8	751
Fruiz	5.6	550
TOTAL	239	48,352

The station workforce is made up of 30 firefighters, 6 corporals and 3 sergeants.

Iurreta Station



This is the station that serves Durangaldea. Located next to the A-8, it covers the following municipalities:



Municipality	Km ²	Inhabitants
Durango	15.2	29,609
Ermua	6.2	15,589
Amorebieta-Etxano	58.3	19,587
Elorrio	37.2	7,309
Abadiño	36.1	7,708
Berriz	30.1	4,535
Iurreta	14.7	3,695
Zaldibar	11.8	3,020
Atxondo	23.2	1,372
Mallabia	23.4	1,185
Otxandio	12.4	1,336
Mañaria	17.6	530
Izurtza	4.3	210
Garai	7.1	334
TOTAL	297.6	96,019

The station workforce consists of 42 firefighters, 6 corporals, 3 sergeants and an area deputy inspector, also responsible for the Markina-Xemein station.

Markina-Xemein Station



This is the station that serves Lea-Artibai and covers the following municipalities:



Municipality	Km ²	Inhabitants
Ondarroa	3.6	8,246
Lekeitio	1.9	7,178
Markina-Xemein	63.6	5,042
Berriatua	19.8	1,220
Etxebarria	18.1	787
Aulesti	25.3	655
Ispaster	22.6	731
Munitibar-Arbatzegi Gerrikaitz	24.1	473
Amoroto	12.9	398
Mendexa	7.2	425
Ziortza-Bolibar	18.5	405
Gizaburuaga	6.3	192
TOTAL	223.9	25,752

The station workforce is made up of 30 firefighters, 6 corporals and 3 sergeants.

2.2. Bizkaia Prest

Since January 2019, the Provincial Council has had at its disposal the Bizkaia Prest Integrated Emergency Management Centre, located in the premises of the Urioste station and replacing the previous Dispatching Centre. The fundamental mission of Bizkaia Prest is to coordinate responses and dispatch all the necessary resources (human and material) that the Bizkaia Provincial Council puts at the service of citizens in emergency/incident situations, thus offering a more efficient response, 24 hours a day and 365 days a year.

The project was designed with the fundamental objective of improving coordination between the different regional services operating in emergencies, and establishing a single entry point for emergency notifications at regional level, thus guaranteeing an efficient, more coordinated and faster response to emergencies/incidents.



In the same physical space and on the same technological platform, this new centre offers comprehensive, real-time information on all the resources available to the provincial council to deal with any emergency/incident and the possibilities for their mobilisation, as well as the number of firefighters on duty and their distribution by stations, the number of operating vehicles in the service and their distribution, and the forest agents and fire watch teams, etc.

Decision-making is therefore more complete and immediate, reducing waiting times and making the movement of resources more efficient and effective.

During 2022 the consolidation of the centre has continued. The workforce has increased (from 15 to 18 operators) and 3 job-related training courses have been given. The capabilities of the centre have also been improved, providing access to the DFB (Bizkaia Provincial Council) traffic cameras, introducing new functionalities in the *Vespa velutina* application, integrating the centre's support documentation in the *SharePoint-OneNote* tool and implementing the new tree for SPEIS call-outs and a tool for the automatic proposal of resources to be mobilised for each action.

In 2022, Bizkaia Prest has managed 14,638 alarms (notifications of incidents or emergencies). The usual channel for receiving alarms is 112-SOS Deiak, and alarms can also be received through other institutions (police, town halls, etc.) or individuals.

These alarms are analysed and assessed by Bizkaia Prest staff, and in the event that they require the mobilisation of DFB resources, the corresponding service is created. A service is an action generated so that the SPEIS or the resources of the Department of Sustainability and the Natural Environment resolve the alarm received. In this document the words “call-out” or “intervention” are also used with an equivalent meaning.

Bizkaia Prest is committed to managing urgent alarms in less than 180 seconds. This implies analysing the information, classifying the type of intervention and mobilising the appropriate resources in less than 3 minutes.

The 14,638 alarms managed led to the creation of 6,429 SPEIS services and 522 services for the resources of the Department of Sustainability and the Natural Environment. The rest of the alarms did not generate services, either because they were informative (for example, weather warnings), or because it was not actually appropriate to perform any service.

2.3. Staff

The Sub-directorate of Emergency Management and Civil Protection has a workforce of 437 people distributed as shown in the following table.

POSITION	Number of people
Firefighters	312
Corporals	54
Sergeants	24
Deputy inspectors	11
Officers	3
Head of the Prevention, Training and Civil Protection Section	1
Head of the Station Operations and Management Section	1
Deputy Director of Emergency Management and Civil Protection	1
Bizkaia PREST operators	18
Head of Bizkaia Prest Section	1
Head of the Technical-Administrative Section	1
Administrative, logistics and vehicle staff	10

Incorporation and loss of staff

In 2022, a total of 54 people have taken up their posts as career civil servants in the Sub-directorate of Emergency Management and Civil Protection of the Bizkaia Provincial Council, including a new group of 50 firefighters.

- 3 deputy inspectors
- 1 corporal
- 50 firefighters



In addition, the Bizkaia Prest workforce has increased from 15 to 18 operators and emergency operators.

During the year a total of 11 people have left due to retirement:

- 1 administrative staff
- 1 sergeant
- 1 sub-officer
- 4 corporals
- 4 firefighters

2.4. Vehicle fleet

As of 31 December 2022, the Fire and Rescue Service of the Bizkaia Provincial Council had a fleet of 100 vehicles.



Of these, 63 are heavy vehicles and 37 are light vehicles. In addition, the SPEIS has 29 trailers. Each station has a standard supply of vehicles and there are also several replacement vehicles of each type, which make it possible to cover operational needs during the repair of breakdowns and scheduled maintenance.

Type of vehicle	Number
BUP – Heavy urban pumper	18
BUM – Medium urban pumper	2
BNP – Heavy supply pumper	7
BFP – Heavy forestry pumper	10
AEA – Automatic ladder truck	11
FUV – Van with various tools	10
GR – Truck crane	5
UTP – Off-road vehicle	13
UMJ – Command and leadership unit	6
Other light vehicles	18

During the year, work has been carried out on several heavy urban pumpers and various utility vans in order to homogenise and standardise the distribution of equipment in service vehicles.

In addition, the service has 7 containers with diverse equipment that is useful for different types of intervention:

Container	Code	Location
Chemical risk container	CQM	Urioste
Shoring container	CAP	Artaza
Medical tent container	CHC	Basauri
Flood pump container	CMB	Iurreta
Self-contained breathing apparatus (SCBA) container	CER	Derio
Generator and trolley container	CGC	Basauri
Hose container	CMP	Urioste (Port)
Command Unit container	CPMA	Derio

2.5. Open innovation

Working following the principle of Open Innovation is a fundamental objective for the organisation. In recent years, the service has been working on the integration and development of new technological projects to improve the interventions of the regional emergency services and facilitate their management. And this is all carried out in a context of Open Innovation where the team's reflection on the need to innovate in their processes or activities has been encouraged, identifying spaces for improvement and change to take advantage of the opportunities offered by the new digital reality. For this purpose, ongoing collaboration with companies and organisations that generate knowledge, as well as with other emergency services, is of vital importance so that together we can develop an offering that meets the real needs of the emergency services.

In 2020, within this framework of open innovation, the people responsible for the service participated in the "Digital Acceleration Programme for Public Institutions" provided by the Instituto de Empresa (IE), through which a series of technological challenges were identified and prioritised for the service in the short, medium and long term, and possible innovative

solutions for start-ups, scale-ups and digital SMEs that respond to these challenges were sought.

As a pilot project, one of the challenges was addressed by focusing on exploring solutions that could help facilitate the management and maintenance work of the work teams: *How could it be ensured that the emergency service vehicles had all the appropriate equipment and with the correct check-up status, monitoring this in real time?*

In 2021, the SPEIS belonging to the DFB had already worked on the implementation of a system for real-time monitoring of the equipment carried by one of the service's main trucks. The truck in question is the heavy urban pumper of the Artaza Fire Station.

The technology used was RFID. Given the difficulties of the project, since the trucks have equipment (either because of the material it is made of or because of its own geometry or because of its location in the truck) that makes it difficult to read with existing technology, it has been decided carry out the project in phases until a technology is developed that allows the most comprehensive reading of the truck's equipment in order to reliably and robustly monitor it.

In this regard, in 2022 the project continued in the areas of the truck that offer a reliable level of reading with the technology that exists today. More specifically, work has continued on achieving logistical control of the cab equipment, which in turn will allow real-time communication of the identifiers relating to the people involved who are in the truck cab.

- To obtain a stable and robust reading rate in the cab, detecting the SCBA, thermal camera, explosimeter, CO-oximeter and tester.
- 100% level of detection of the people involved in the intervention who are in the truck cab.
- Detection of the moment in time in which the vehicle leaves for the intervention and enters again after the intervention.
- The readings for the people involved, as well as the departure/return of the truck, must be recorded in the SPEIS emergency management software (IpSige).

The system consists of an ultra-high frequency RFID reader to which eight compatible antennas are connected via SMA-K to N female cables. The antennas are used to emit the waves transmitted by the reader in the specific compartment in which they are installed and to receive the signals emitted by the tags that identify the assets present in the compartment in question, and pass this information to the reader. The system therefore also includes a number of RFID tags that depends on the number of items included in the inventory.

The system is completed with an IoT node with the logic that allows the reader to request the inventory that it stores from the information collected by the antennas, process it and send it to the server using cellular technology (3G/4G). This node could in the future process another type of sensor within the BUP through ports or extension cards.

The installation in each BUP consists of:

- An IoT communications node (Advantech UNO-2372G) that collects the data provided by the RFID reader and sends it to the server via cellular communication.
- An eight-port RFID reader responsible for collecting and storing the inventory transmitted by each antenna. The reader is from the Syncotek brand, model SR-RU-2889.

- A 12V to 220V power inverter with two ports to power both the IoT node and the RFID reader through the cigarette lighter socket available in the truck.
- Eight RFID antennas with circular polarisation responsible for obtaining the information from the tags stored in each compartment. The model in the case of the antennas is the SR-AU-TC20120. They are antennas with circular polarisation, 6dbi and UHF (like the reader).
- An RFID tag for each item to be monitored. The type of tag will depend on the nature of the equipment on which the tag is to be installed. The installed tags are the following (rugged, flexible, etc.)

2.6. ISO certifications

The Directorate of Emergency Management and Civil Protection is ISO 9001 (Quality Management Systems) and ISO 22320 (Emergency Management) certified. In 2022, AENOR has carried out renewal audits of both certifications.



The audit corresponding to ISO 22320 has also involved carrying out several simulations of activation of the multiple alarm procedure.

During this exercise, an episode of heavy rains that flooded inhabited areas in various regions of Bizkaia was simulated, making it necessary to prioritise the interventions to be carried out.

2.7. Open Data

Open Data is a philosophy that promotes the availability of data held by the administration for the public, freely, in reusable formats and without restrictions regarding its conditions of use.

Open Data Bizkaia is the service that publishes the information managed by the Provincial Council and Public Administrations of Bizkaia, in the form of raw data; that is, original data that is created, compiled or obtained from any source and that have not been interpreted. They are offered in digital, standardised and open formats, following a clear structure that allows their understanding and consumption, making it possible to generate products or services from them.

Since 2021, in collaboration with the Directorate of Good Governance and Transparency, the SPEIS published the main information for the interventions attended in Open Data. They are available at www.opendatabizkaia.eus and are updated quarterly.

3. Sustainability strategy

In 2021, the General Directorate of Emergency Management and Civil Protection carried out a process of strategic reflection together with its stakeholders in order to define the first sustainability strategy for the emergency service of the Bizkaia Provincial Council.

The final result was the definition of the 2022-2024 Sustainability Strategy for the emergency service, which contemplates twelve actions structured around three pillars: ecology, society and prosperity.

The design of these new systemic projects not only aims to resolve operational situations (such as environmental impact or public awareness), but also to have a profound impact involving a cultural change to the organisation based on sustainability.

This strategy aspires to build new leadership and new systems of relationship between people in the service, opening up spaces for dialogue and fostering internal participation in project decision-making.

The actions proposed in the strategy will serve to strengthen socially responsible public purchasing, promoting open innovation. The strategy also seeks to contribute to the transparency of the organisation and emphasise the importance of the three-way balance of accountability, measuring the return on investment also from a social and environmental perspective.

The plan is structured around three pillars: ecology, prosperity and society.

The ecology pillar proposes the carrying out of projects in the environmental field, rethinking the activities of the service so that they have the least environmental impact.

FOCUS	ACTION	SITUATION
1 - ECOLOGY	1.1. Limit the environmental impact of interventions	Planned for 2024. Operating procedures will be reviewed
	1.2. Developing the training area of the future	IN PROGRESS. In 2022, a workshop was held with experts from all over Spain, a renovation project in phases was drawn up, and the first actions on the infrastructure of the training area were carried out.
	1.3. Moving towards sustainable mobility	IN PROGRESS. Charging points for electric vehicles have been installed in the stations of Urioste, Basauri and Artaza. In 2023, progressive installation will be addressed in the rest of the SPEIS stations.
	1.4. Improve the efficiency of our stations.	IN PROGRESS. In 2022, the energy and environmental audits of all the station and the Ispaster training area have been completed. The renovation of windows and other works to improve energy efficiency have been undertaken in several stations (see the chapter on investments). Work has been carried out on the preparation of a plan for the installation of photovoltaic panels in all the stations during 2023 and the first quarter of 2024.
	1.5. Mitigate the impact of CO2 generation	Planned for 2023.

WORKSHOP TO DEFINE THE TRAINING AREA OF THE FUTURE

In the medium term, the Bizkaia Provincial Council aims to renovate the Ispaster firefighters training area, where the drills are carried out with real fire. These facilities receive between 1,500 and 2,000 people a year for training, depending on the types of courses that need to be taken. This represents a habitual occupancy of more than 60%. Given its importance, the SPEIS has started an investigation process to outline this future update of its facilities. To this end, in May there was a meeting of a group of renowned experts in fire training for professional firefighters, a group of the most highly reputed experts in this field in both Spain and in Europe.



After a morning visit to the Ispaster training area, they compared their knowledge and experience in the design, construction and use of training areas for firefighters. The work meetings took place in the Arratzu station. The 8 experts who met in Bizkaia invited by the SPEIS work in the fields of engineering and architecture and come from different Spanish fire services (Generalitat de Catalunya, Guadalajara, Madrid, Málaga, Consorcio de Valencia and Saragossa).

The prosperity pillar proposes promoting organisational and economic projects related to open innovation, responsible purchasing and transparency. In addition, at the suggestion of the extended team that participated in the elaboration of the strategy, an action is included to promote citizen awareness.

FOCUS	ACTION	SITUATION
2 - PROSPERITY	2.1. Consolidate participation in open innovation projects	COMPLETED. During 2022, the equipment control project has been addressed including its reformulation to control certain items in the cab
	2.2. Promote a sustainable purchasing policy	IN PROGRESS. In 2022, analysis of the SPEIS purchasing patterns began. 194 of the 228 suppliers are located in Bizkaia, 17 in the other historical territories (Gipuzkoa, Araba), 13 in neighboring provinces (Navarre, Cantabria, La Rioja) and 58 in the rest of Spain.
	2.3. Release relevant	COMPLETED. The data on the interventions are available in

	information in Open Data	Open Data Bizkaia and are updated quarterly.
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The society pillar seeks to promote the development of people and communities to help achieve an adequate and equitable global quality of life, promoting their involvement to contribute to the society of which they are a part today.

FOCUS	ACTION	SITUATION
3 - SOCIETY	3.1. Promote citizen awareness	IN PROGRESS. During 2022, 10,000 minors and their families have been reached through the stand in the Christmas Children's Park (BEC), prevention brochures and guidelines for action in domestic fires have been distributed, talks have been given in educational centres and collaboration has been carried out with the Arkaute Police and Emergency Academy in the training of new Ertzaintza agents and local police officers.
	3.2. Promote operational prevention	Planned for 2023-2024.
	3.3. Implement the new Provincial Emergency Plan of the Historical Territory of Bizkaia (PFETHB)	COMPLETED. The new Provincial Plan has been drafted, approved, published and implemented. The new advisory council has been set up and its data has been incorporated into Bizkaia Prest. Three catastrophic situation drills and activation of the PFETHB have been carried out so that the members of the advisory council (full and alternate members) are familiar with the instrument and their responsibilities.
	3.4. Improve the detection of and response to risk situations with vulnerable groups	Planned for 2023. This will be addressed together with the Department of Social Action.
	3.5. Promote equality in the SPEIS	Planned for 2023-2024.

4. Investments

In 2022, the Directorate of Emergency Management and Civil Protection had a budget of €2,761,888.94 for investment. The most important investments are detailed in this section.

4.1. Buildings

In 2022, the new Arratzu station was inaugurated, thus completing the renovation of the SPEIS station network. In addition, other improvements have been made in the stations at a cost of €1,176,800.

Inauguration of the new Arratzu station

On 31 March, the new Arratzu fire station was inaugurated, which will serve a population of around 46,300 people in about twenty municipalities in Busturialdea-Urdaibai. The new facilities, located in the Barrutia neighbourhood next to the BI-2238 Gernika-Arteaga road, replace the Gernika station, the oldest of the eight that make up the SPEIS that was in operation.



The new Arratzu station is built on a 6,150 m² plot of which 2,100 m² are occupied by the new building. The main building, with a usable area of 1,750 m², is divided into two floors for administrative, residential and sports uses. On the ground floor are the guard post, the offices of the corporal and sergeant, changing rooms and a classroom for teaching classes and welcoming visitors; while the upper floor has the gym, bedrooms, toilets, and the dining room, living room and kitchen, in an integrated space. The entire building has been designed paying special attention to functionality, so that response times to an incident are minimised, and it has been adapted to the natural environment in which it is located.

The construction has the highest energy rating of (A), with heating and cooling installations that use geothermal energy that is applied through a radiant floor system. Also, all the lighting is LED.

The garage, with a more industrial aesthetic, is located in another building attached to the one described above and communicating with it both physically and visually, . It houses the

vehicles that make up the station's provision: a heavy urban pumper, a forestry pumper and a supply pumper, a fully automatic ladder truck, a van with various tools and an off-road vehicle. It also has a storage area for equipment and tools such as snowploughs, pumps, sand trailers, salt spreaders, etc. The complex includes an area for training and manoeuvres and an exercise tower on the ground floor plus five floors.

Thanks to the greater free area available from now on, in the new Arratzu station it will be possible to set up different training areas that allow the daily training of the crews, who will be able to practise both the release from accident vehicles in multiple and varied configurations and all kinds of rescues and the handling of fires of different types, thanks to the versatility of the training tower. There will also be facilities suitable for practising work at height and rescues in confined spaces.

The larger built area has also made it possible to design the station in such a way that the protocols for the prevention of contamination arising from the interventions can be applied, thus ensuring the maintenance of clean areas free of contamination. The breadth of the built area, in addition to improving the habitability of the station itself, allows all the vehicles which the service has available to be located under cover, allowing better care and increasing their useful life.

The Bizkaia Provincial Council has invested 6.5 million euros in the construction of this new station (over several years and through a commission awarded to the provincial council company Azpiegitura).

Investment in the rest of the stations

During 2022, in addition to the completion of the new Arratzu station, various improvement works have been carried out in the rest of the stations and their infrastructure.

In the Urioste station, the comprehensive refurbishment of the station has continued, completing the first phase (intervention clothing store and ground floor) and starting the second phase (first and second floor). The installation of the roof for machinery has begun in several stations (Basauri, Iurreta, Derio, Artaza), the contract for the construction of a training tower in the Derio station has been awarded and the channelling of waste water from the Ispaster training area has been addressed, where work has also been carried out to correct the foundations for the training area slab.

Station	Project	Amount	Observations
Urioste	Station refurbishment (phase 2)	€376,000	Continues in 2023
Basauri	Roof for machinery	€48,000	
Iurreta	Roof for machinery	€20,500	Continues in 2023
Derio	Roof for machinery	€21,000	Continues in 2023
Derio	New training tower	€87,500	Continues in 2023
Ispaster	Channelling of waste water and foundations for slab	€64,000	Continues in 2023
Artaza	Awning for machinery	€3,000	Continues in 2023

In addition, other minor repair works, energy efficiency and safety improvements have been carried out in various stations for the following amounts:

Station	Amount
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Urioste	€160,400
Basauri	€58,600
Artaza	€105,800
Iurreta	€12,700
Arratzu	€8,100
Markina	€143,700
Derio	€31,600

4.2. Vehicles

In 2022, a heavy forestry pumper was acquired from the Rosenbauer brand for an amount of €398,065.

Built on a Mercedes Unimog chassis, it has 4x4 traction, a water capacity of 3,500l plus 500l for self-protection. This vehicle offers several substantial improvements in terms of occupational risk prevention, since in addition to the independent water tank, an electric pump independent of the main pump for the self-protection circuits will be installed.

It also includes fireproof curtains and breathable air equipment in the cab. As an additional safety element, a overturning risk alert system will be installed, which warns the driver through acoustic and visual signals.

4.3. Equipment

During 2022, the purchase of new equipment has been carried out to renew or improve various operating capacities. The following pages list some of the most relevant improvements.

ATEX WALKIE-TALKIES

18 Motorola MTP8550 ATEX portable transmitter units (walkie-talkies), suitable for explosive atmospheres, have been purchased.

They are TETRA devices that will be compatible with the current communications system, offer powerful audio, better coverage, longer battery life, increased strength, advanced ergonomics and greater ease of use.

This equipment will be introduced in the operation to improve the safety of teams of two in the hot zone in interventions due to gas leaks, dangerous goods, etc.



AIR CYLINDERS FOR SCBA CONTAINERS

44 units of 6.8-litre composite breathing air bottles have been purchased, with the aim of completing the air reserve available in the SCBA container and replacing equipment that has reached the end of its useful life.

With this acquisition, the respiratory equipment container has 90 loaded bottles ready to be deployed in a few minutes for any long and/or complex intervention in which it is necessary to guarantee the availability of breathable air.

HIGH PRESSURE CUSHIONS

Two sets of high-pressure pneumatic cushions have been purchased together with their actuators and accessories.

One set was purchased for the shoring container. This is the model S.Tec 12 V102 Lifting Bag from the brand Vetter, with a lifting capacity of 102 tonnes. The set consists of two units.

A set for training and replacement of equipment undergoing check-ups or repair has also been acquired. This is the model S.Tec 12 Lifting Bag from the brand Vetter, with V12, V35 and V59 cushions, identical to the one available in each station.



WAYS SAFE – GUIDANCE SYSTEMS

8 units of the LGI Waysafe system have been purchased. This is a directional safety system that shows the user the direction of travel along the entire length of the illuminated cable.

It serves as a substitute for the guide rope, providing safety in interventions in which smoke diving is complex or there is a significant risk of disorientation.

Both speed of travel and brightness levels can be adjusted to suit the user simply by adjusting the controls on the front plate.



MEDICAL BACKPACKS

14 medical backpacks and the necessary medical equipment and consumables have been acquired to complete the standardisation of health care backpacks in the first intervention heavy urban pumpers (BUP).

With this acquisition, all SPEIS medical supplies will be homogenised, so that the personnel involved will find the same material and with the same distribution regardless of the fleet and the vehicle in which they are working.



CPR MANIKINS (LITTLE ANNE QCPR FAMILY)

10 sets of training manikins for cardiopulmonary resuscitation (CPR) have been purchased. Each set is made up of an adult, a child and an infant manikin, all of them with sensors that provide real-time data on the quality of the CPR being performed.

With this acquisition, each station has a complete set and the health care working group has two additional sets for training activities.



ELECTRIC FANS

Two “Blowhard Commando” model positive pressure electric fan units have been purchased.

These are light, powerful fans with a capacity of more than 41,000 m³/h of free air (27,700 m³/h of AMCA flow).

In 2021, the combustion fans were replaced in the first response BUPs at six stations, and during 2022 the same fans have been incorporated into the first response vehicles of the two remaining stations. This acquisition will make it possible to have replacement equipment and training.



FRANCO GARDA STRETCHERS

Two Franco Garda stretchers have been purchased for their introduction into the Basauri and Iurreta stations.

These are multipurpose stretchers, usable in high mountains, in wall rescue, in aquatic environments and also on snow thanks to their brake system. The frame is made up of a tubular metal structure covered in a fibreglass/polypropylene compound that gives it resistance to perforation, bending and abrasion.



The frame is articulated and can be folded into three separable parts in order to be able to divide the load on several carriers in case of walking access to the victim.

RECHARGEABLE TRAINING FIRE EXTINGUISHER

Six units from the Leader brand have been acquired. These fire extinguishers allow very specific and practical training sessions to be carried out in order to apply the correct movements learned during the theoretical courses, while respecting the environment at the same time. In this way, more effective training and awareness actions will be carried out with local police, vulnerable groups and other groupings, etc.



LUKAS EXTRICATION EQUIPMENT

Two sets of the Lukas E3 series have been purchased, consisting of cutters, separator, piston, chargers and replacement batteries.

With this acquisition, there will be five sets of extrication tools renewed and replaced by battery-powered equipment.



RETRACTABLE LADDERS

10 units. Ten units of Irudek model Koala R15 retractable systems with rescue winch and energy dissipator have been purchased.

These elements are necessary for the upcoming implementation of a safe work procedure in ladder trucks.



LRP6 PLATFORMS

Four Lukas brand LRP6 rescue platforms have been purchased.

This is an aluminium platform provided with folding ladders on two sides. The adjustable feet built into the ladders can be used to compensate for uneven ground. A handrail can be attached to both sides of the base platform.

It is especially useful during extrication work on heavy vehicles.

With this acquisition, all the SPEIS stations now have a platform.



In 2022, the SPEIS invested €370,000 in clothing. This investment has involved the purchase of:

- 75 pairs of intervention boots.
- 500 pairs of trousers for the station.
- 800 T-shirts of various types.
- 120 intervention suits for structural fires.
- 500 sports shirts and 500 sets of sportswear.
- 135 technical rescue jackets.

In addition, 54 F2XR and 64 F1XF helmets from Gallet MSA have been purchased to replace those that had reached the end of their useful life.

5. Interventions

5.1. Key data

During 2022, the total number of call-outs made by the Bizkaia Fire and Rescue Service rose to 6,429, compared to the 5,692 call-outs made in 2021 (which represents an increase of 12.94%).

This is the year with the most call-outs recorded in the SPEIS, except for 2015, when the arrival of the Asian hornet (*Vespa velutina*) generated an extraordinary number of interventions until a work protocol was agreed between town councils and the DFB.

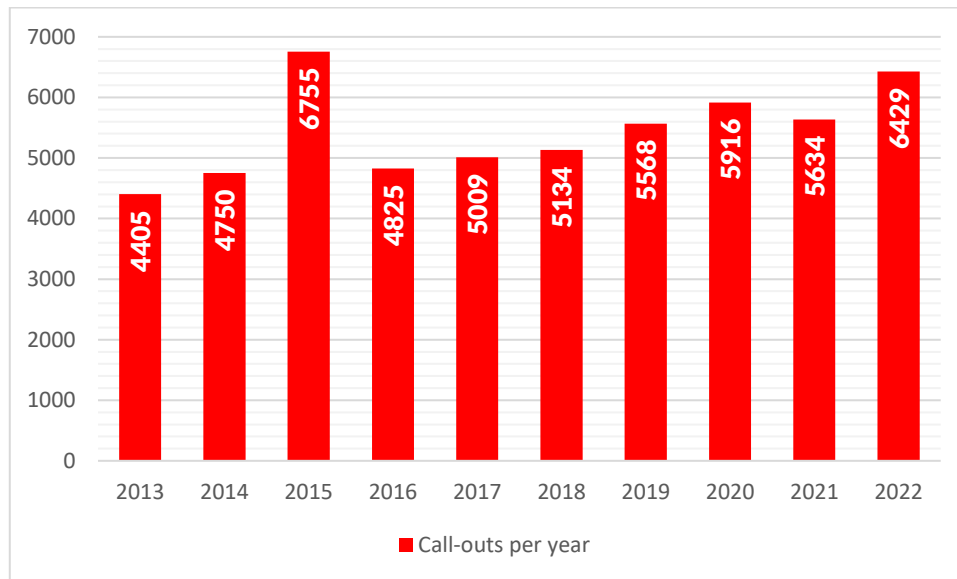


Figure 1 - Call-outs per year (2013-2022)

In 2022, the station with the highest number of call-outs as a first response station was Urioste (2,007 call-outs, 31% of the total number of recorded call-outs and surpassing the barrier of 2,000 call-outs for the first time), followed by Artaza (1,217) and Basauri (996). The station with the fewest call-outs was Markina-Xemein (232). All the stations have seen an increase in the number of call-outs compared to the previous year. On the next few pages the call-outs made by each station are broken down.

The stations are distributed throughout the historical territory with the main objective of keeping the isochrones (response time curves) as well balanced as possible, which means that there are large differences for each station in terms of the population served in first response.

For this reason, although there is a great difference in the call-outs carried out by the largest stations compared to the smallest, the call-outs from each station per 1,000 inhabitants show a greater proportionality.

In this regard, during 2022, large stations recorded between 7 and 8 call-outs per 1,000 inhabitants, while small stations ranged between 9 and 11 call-outs per 1,000 inhabitants, approximately.

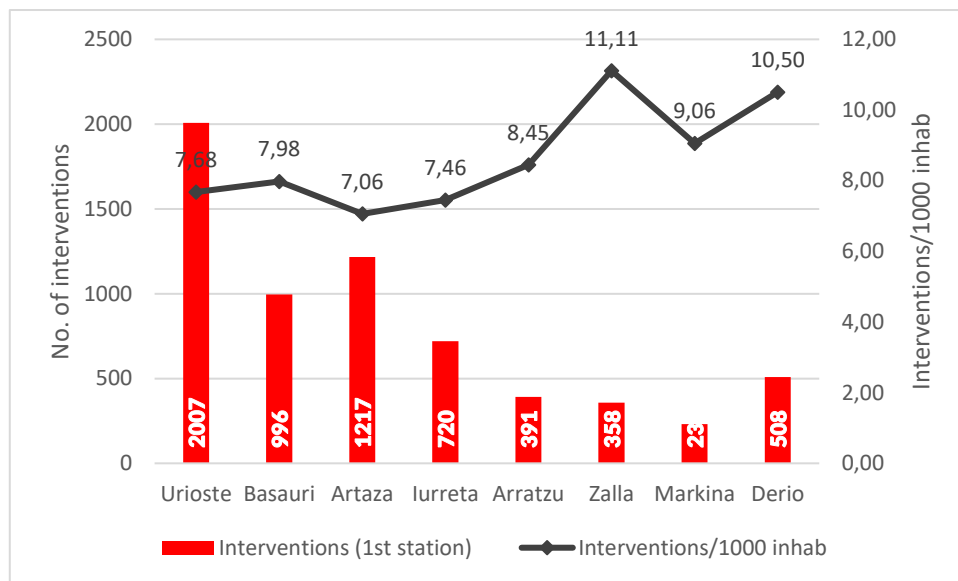


Figure 2 - Call-outs in 2022 by station (total and per 1,000 inhabitants)

In terms of the type of action, in 2022 the call-outs have been distributed in a proportional way: 2,035 fires (32% of the total call-outs), 2,185 rescues (34% of the total) and 2,209 technical assistance (34% of the total).

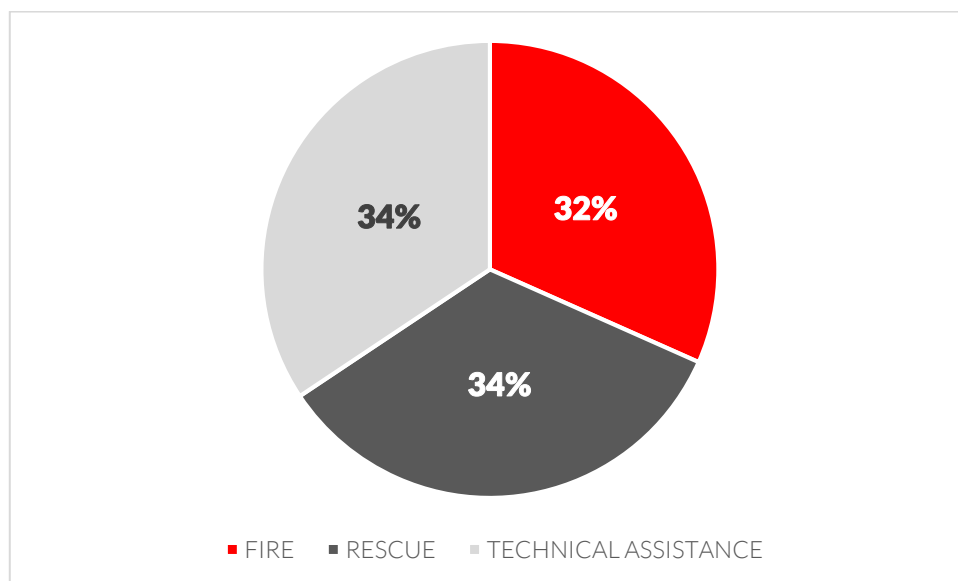


Figure 3 - Call-outs in 2022 by type (percentage)

This apparently represents a change from the historical series, in which rescues were the main type of call-out, but in reality it only responds to a methodological change: starting this year, call-outs to remove hymenopteran nests (bees, wasps, etc.) and the making safe of constructions are classified in the technical assistance group.

This change is linked to the global review that has been made of the classification of call-outs and is explained in more detail in the Procedures section.

The ratio between the various types of call-outs is repeated, with slight variations, in all the stations. The following Figure shows the breakdown of call-outs from each station by type of intervention.

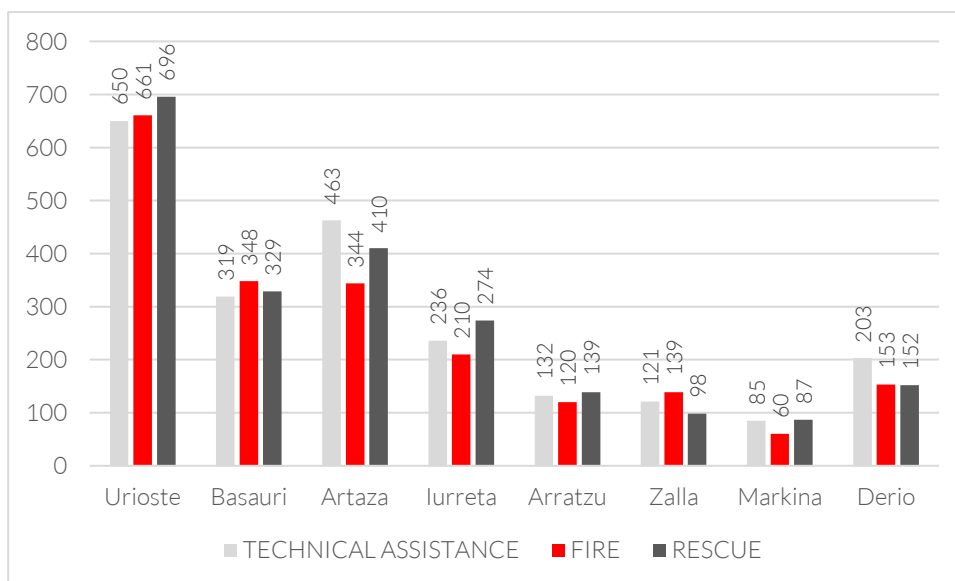


Figure 4 - Call-outs in 2022 by type and station

Distribution by municipalities

During 2022, the SPEIS has intervened in the 112 municipalities of the Historical Territory of Bizkaia. If we analyse the interventions according to the municipality in which they occurred, we see that the municipalities with the most interventions are, in general terms, the main population centres.

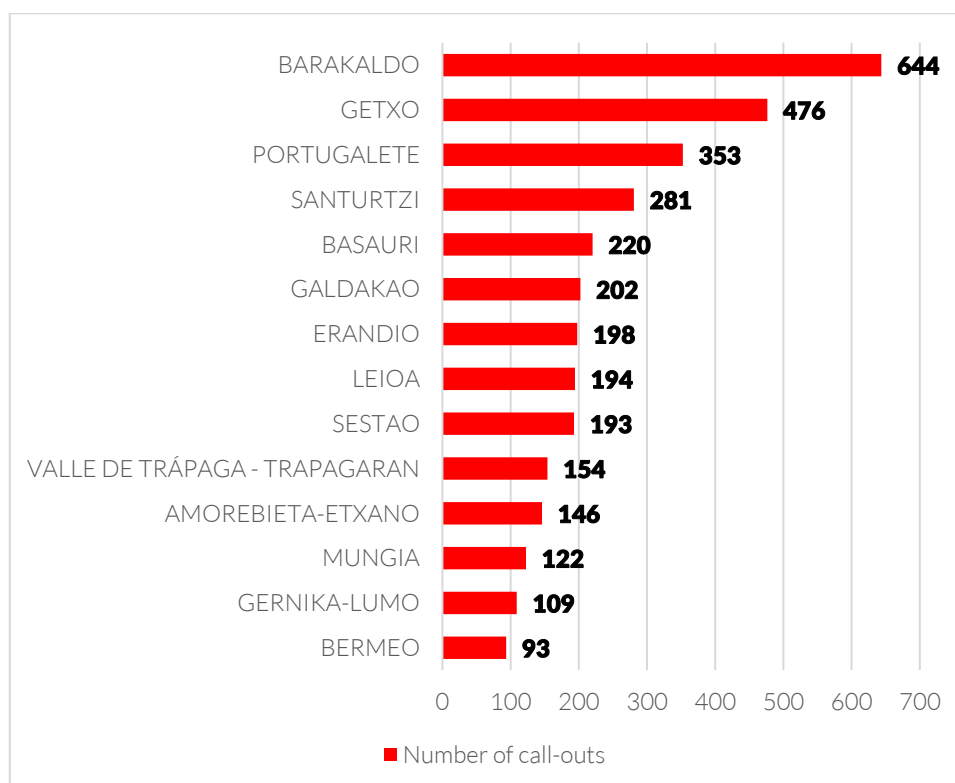


Figure 5 - Municipalities of Bizkaia with the highest total for call-outs in 2022

The municipality in which the most interventions have been carried out has been Barakaldo (644 call-outs), followed by Getxo (476), Portugalete (353), Santurtzi (281) and Basauri (220). These are the five municipalities with the largest population in the Historical

Territory of Bizkaia, excluding Bilbao, which has its own municipal service and is not served by this SPEIS.

The other ten municipalities in which more interventions have been carried out have been Galdakao, Erandio, Leioa, Sestao, Durango, Trapagaran, Amorebieta-Etxano, Mungia, Gernika-Lumo and Bermeo. In 14 of these 15 municipalities, there have been more than 100 call-outs.

In another 16 municipalities the number of recorded call-outs has been between 50 and 99. In 55 municipalities, between 10 and 49 call-outs have been made. And in another 26 municipalities, less than 10 call-outs have been made. It should be noted that during 2022 there has not been any municipality in Bizkaia where no intervention of any kind has been recorded.

Regarding the interventions in relation to the number of inhabitants, the average for the population served was 7.94 call-outs per 1,000 inhabitants.

The 20 municipalities with the highest number of call-outs in relation to their population are reflected in the following Figure. It should be noted that municipalities with fewer than 5,000 inhabitants have been omitted, since a small difference in the number of call-outs notably alters their mean and is not representative.

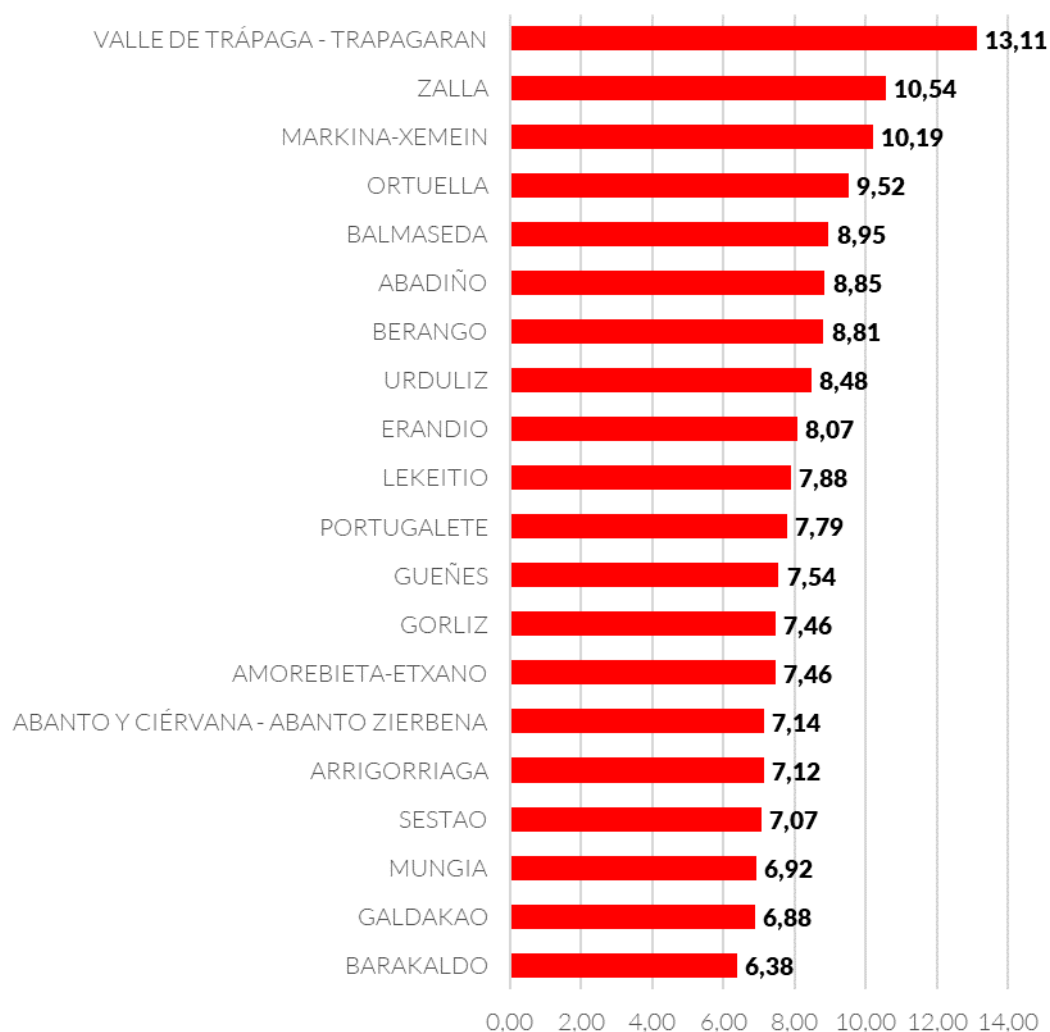


Figure 6 - Municipalities of Bizkaia with the most call-outs per inhabitant in 2022

Interventions have been carried out in Gipuzkoa (6 call-outs) and Araba (3 call-outs), based on the existing collaboration agreement between the three provincial councils so that citizens are served from the outset by the nearest fire station and fire brigade. Additionally, interventions in Navarre, Burgos and La Rioja have been supported, with an intervention in each one.

The intervention in Navarre is the one carried out during the wildland fires in Navarre on 19 June, when three teams of reserves from Basalan (36 people), two Mountains Service technicians and 41 SPEIS personnel with a heavy supply pumper, a heavy forestry pumper, a heavy tanker, 3 off-road vehicles and 3 pickups with tools travelled there from Bizkaia.

Regarding Burgos, an intervention was made at a serious fire in a single-family home in Villasana de Mena.

Finally, in La Rioja, logistical support (foam-making liquid) was provided in the fire that occurred in a biodiesel plant in Calahorra.

Distribution by months

The highest number of call-outs have been recorded in the months of summer and early autumn (June-October). The number of fires and rescues remains stable throughout the year, but as can be seen in the following Figure, in the summer there is a large increase in technical assistance. This is mainly due to the increase in call-outs associated with the removal or neutralisation of Asian hornet nests.

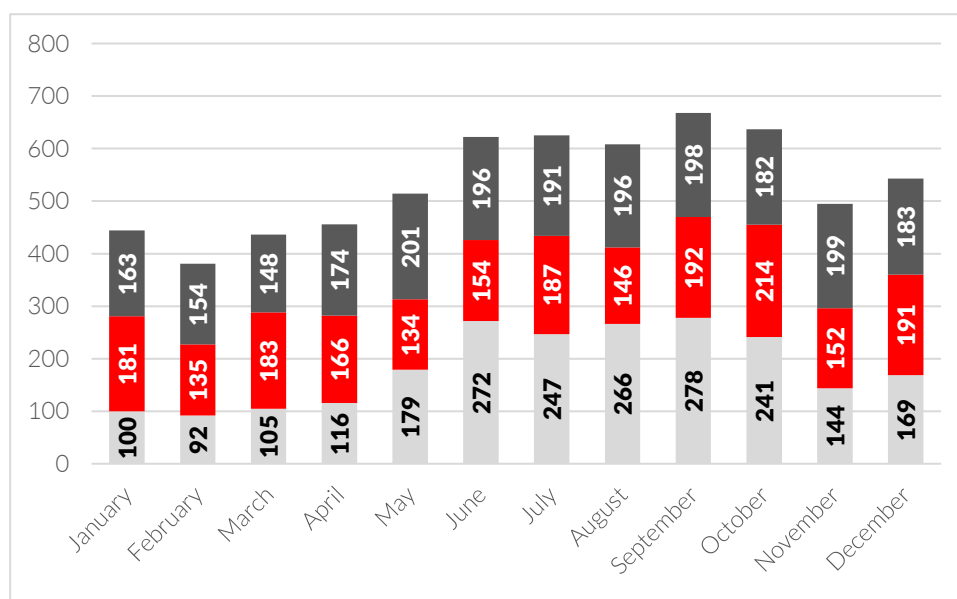


Figure 7 - Call-outs in 2022 by month

Call-outs per day

During 2022, on 58.36% of the days of the year (213 days), the SPEIS has attended between 11 and 20 daily calls.

Another 91 days (24.93% of days of the year) between 21 and 30 call-outs per day have been carried out. There have been 44 days in which between 5 and 10 call-outs have been carried out. On no day during the year have less than 5 call-outs been carried out. There have only been 17 days in which more than 30 call-outs have been carried out, and of these only three have exceeded 40 call-outs.

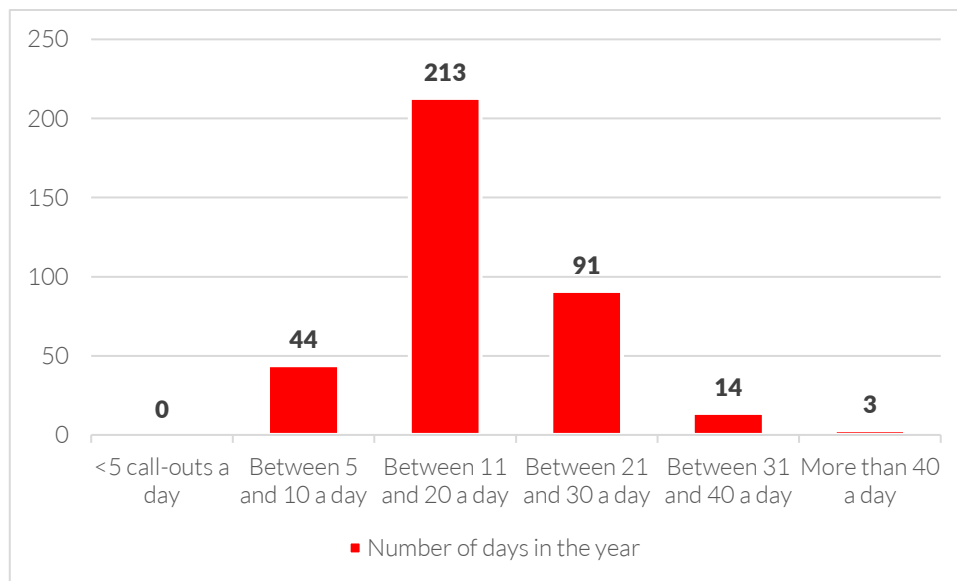


Figure 8 - Distribution of call-outs by days of the week

The daily average of call-outs has been 17.62, and the median (the most repeated number) has been 13 call-outs per day (29 days in 2022 had this number of call-outs).

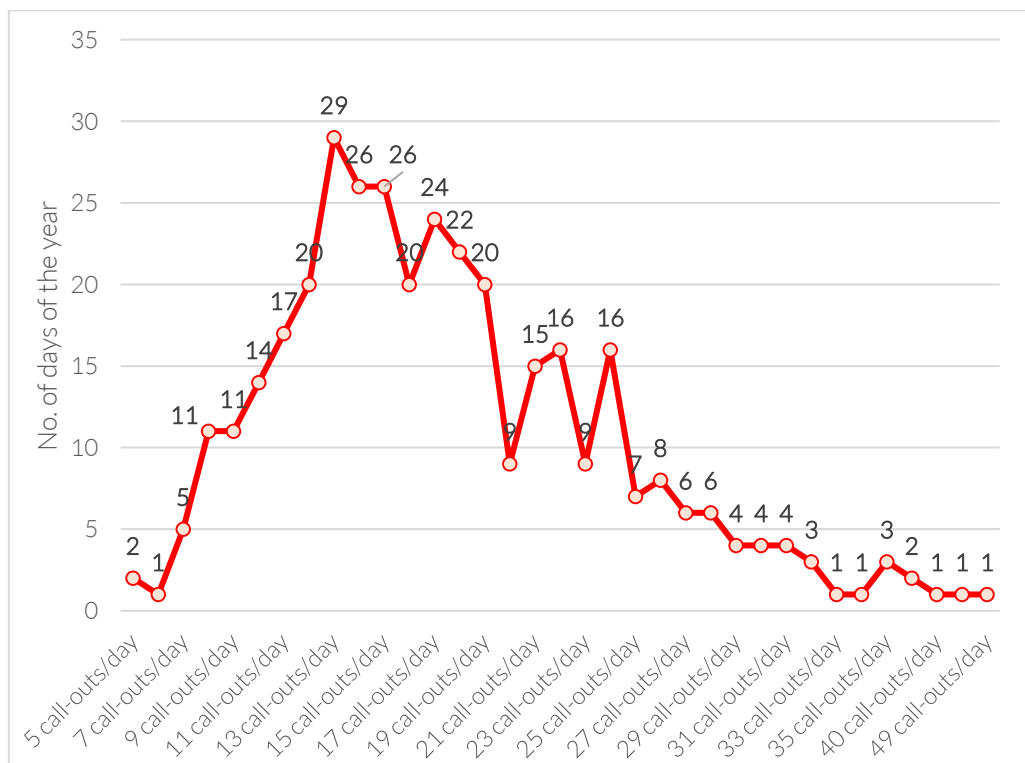


Figure 9 - Number of call-outs per day

The day with the most interventions in 2022 was 23 October (49 call-outs), when a large number of technical assistance call-outs coincided due to strong winds and several wildland fires, including the one that burned almost 500 hectares in the municipalities of Zalla and Balmaseda.

There were also a high number of interventions on 1 January (45 call-outs, partly due to fires associated with the New Year celebrations), and on 31 December (40 call-outs, many due to strong winds).

Distribution by day of the week

There is no defined pattern regarding the days of the week on which most call-outs occur. The historical series is very variable and there is no clear correlation.

However, in 2022 weekends show a greater number of rescues and fires and a lower number of technical assistance call-outs.

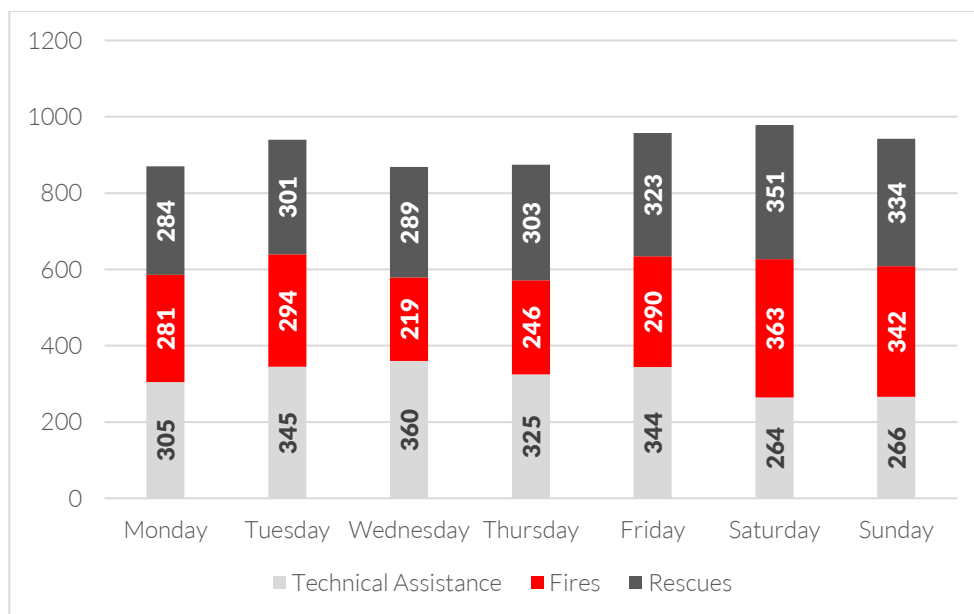


Figure 10 - Distribution of call-outs by days of the week and type

Time distribution

If we analyse the call-outs based on the times of day in which they occur, it can be seen that most of the interventions occur during the day. This is consistent with the fact that the majority of the interventions are caused by the activity of human beings.

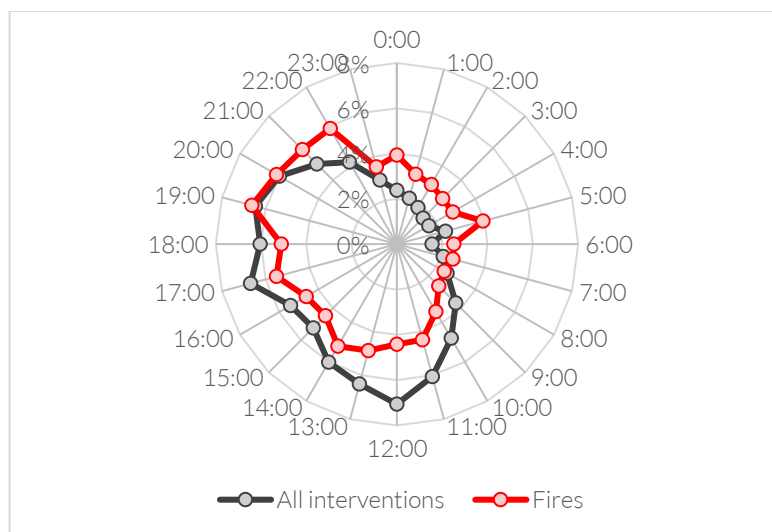


Figure 11 - Distribution of call-outs (percentage) by time bands

5.2. Fires

Firefighting is the original function of the SPEIS and although new areas of action have been incorporated, it still accounts for a third of interventions. Until 2022, the fires attended by the SPEIS were classified into four types: urban, rural, forest and industrial.

Urban fires account for the majority of fire interventions (65% of the total).

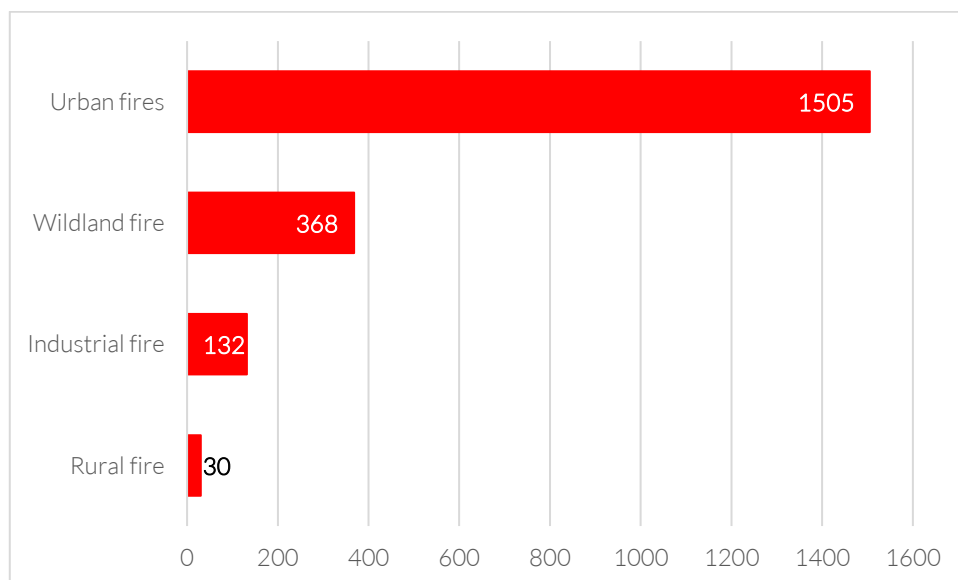


Figure 12 - Number of call-outs due to fires according to type of intervention

Of these interventions for urban fires, more than 900 were small fires. This is how fires involving vehicles, containers or small transformation centres are categorised. Another 554 are house fires and the rest have affected businesses (11 call-outs) and public places (26 call-outs).

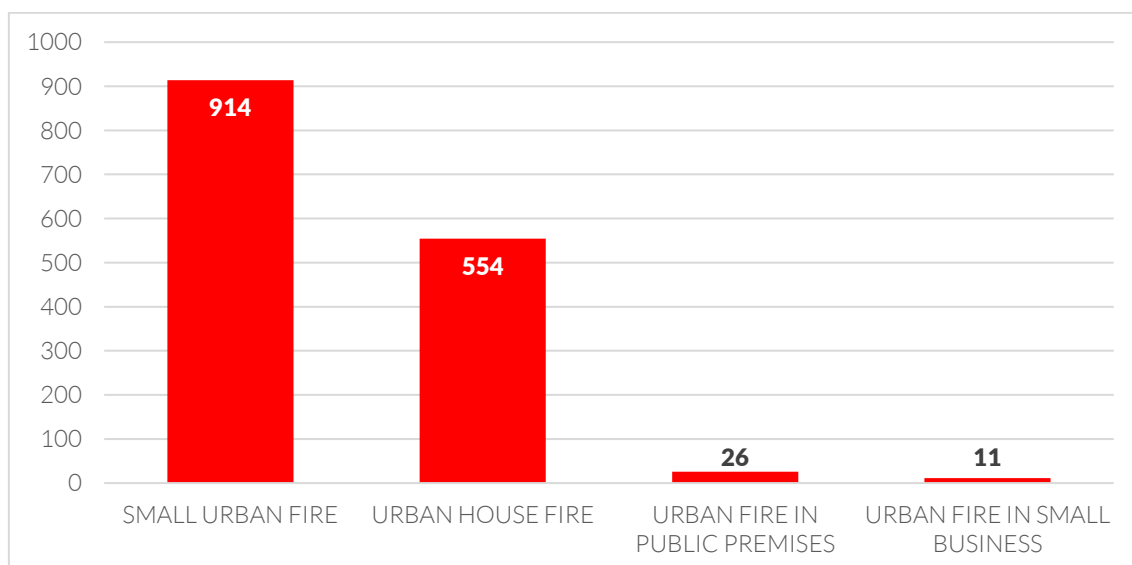


Figure 13 - Classification of urban fires

It must be taken into account that 30 rural fires have also been attended to. These are mostly house fires (single-family, farmhouses, etc.) located outside urban environments. In the reorganisation of the types of accidents to which a response has been provided during 2022, that comes into force in 2023, these fires will be included in the structural fires category together with fires in homes, public places, etc.

With regard to industrial fires, in 2022 there have been a total of 132 call-outs. Several services of this type have been provided during the year that have required the simultaneous intervention of several stations, some of the most notable being the following.

- Chrome-plating company (Basauri) – 6 February
- Vehicle dealer (Erandio) – 29 March
- Kitchen and bathroom company warehouse (Erandio) – 4 April
- Plastic recycling company (Sondika) – 22 July
- Former dealer premises (Lemoa) – 20 July
- Fire at a hydrocarbon plant (Port of Bilbao) – 27 August

With regard to wildland fires, in 2022 Bizkaia has had to deal with some of the biggest wildland fires for more than three decades. In addition to a notable increase in the number of interventions (368, compared to 221 last year, which represents an increase of 66%), fires of great virulence have had to be tackled and have affected a considerable area.

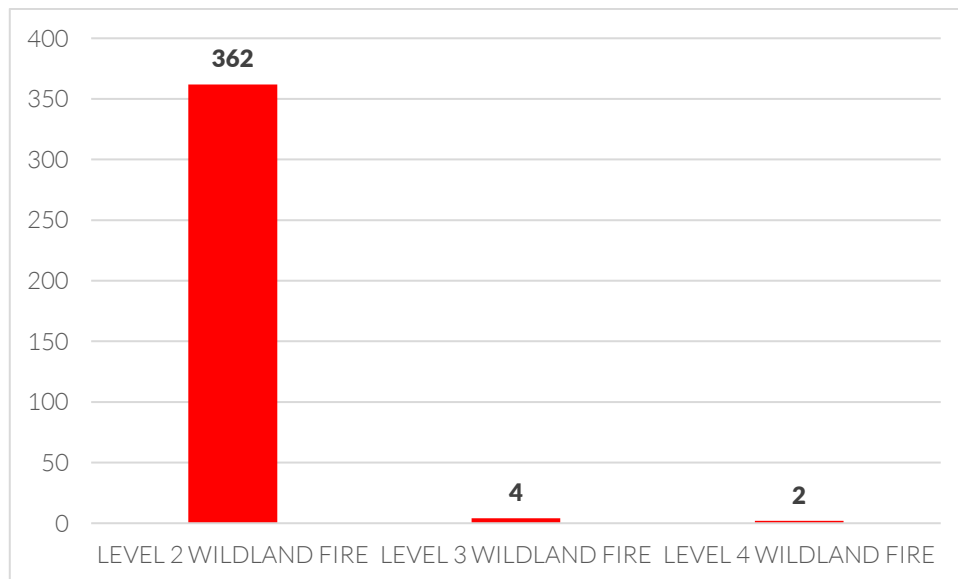


Figure 14 - Classification of wildland fires attended in 2022

More specifically, the fire that occurred in Zalla and Balmaseda on 23 October burned a total of 441 hectares in Bizkaia alone, being the largest fire in Bizkaia in the last 30 years. Personnel from all the SPEIS stations intervened in this fire for several days, along with Mountains Service and Basalan staff.

Throughout Sunday 23, a total of 111 people participated in the operation: 17 members of the Mountains Service (which always include service technicians and forest guards), 50 operators from Basalan and 44 members of the Fire Service of the Provincial Council of Bizkaia. That first day they operated with 32 vehicles: 17 water trucks, 12 off-road and light vehicles, a 4x4 forestry truck, a pickup and a bulldozer.

On Monday 24, a total of 103 people participated in the operation: 14 members of the Mountains Service, 60 operators from Basalan and 29 members of the Provincial Fire Service. That day 29 vehicles were used: 17 water trucks, 9 off-road and light vehicles, a 4x4 forestry truck, a pickup and a bulldozer.



On Tuesday, the day the fire was considered extinguished at 20:00, and the presence consisted of a human team of 80 people: 29 members of the Mountains Service, 31 operators from Basalan and 20 firefighters from the Fire and Rescue Service. They worked with 24 vehicles: 9 water trucks, 12 off-road and light vehicles, a 4x4 forestry truck, a pickup and a bulldozer.

In addition, on 27 October, wildland fires broke out simultaneously in Berango, La Arboleda, and Larrondo (Sondika), forcing the mobilisation of personnel from all the provincial stations, various forestry reserves, requesting the collaboration of aerial resources, and activating INFOBI (the emergency plan for wildland fires in Bizkaia) again.

Deaths in fires

In 2022, three people died in fires attended by the SPEIS: a woman who died in March in the fire at her house in Barakaldo and two men who died in August during the burning of plant remains in Basauri.

5.3. Rescues

Rescues, or those interventions in which the life or integrity of people and/or animals may be at risk, account for another third of SPEIS interventions.

The most numerous intervention is access to homes with people at risk, with almost 1,000 call-outs of this type in 2022. These are interventions in which it is necessary to force access to homes because there are or may be people at risk inside: elderly people who are alone and do not answer, TEPA (telecare) users who have pressed the help button but do not answer or open the door, minors locked up who are not able to open, etc.

Traffic accidents in which people are mechanically or physically trapped occupy the second position (555 call-outs), followed by search and rescue in rural and mountain environments.

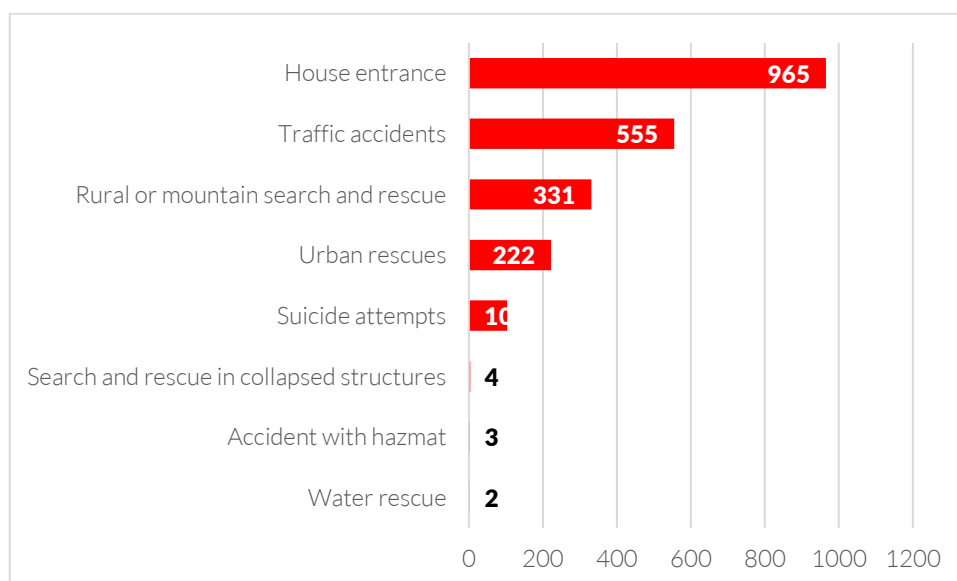


Figure 15 - Number of rescue call-outs according to type of intervention

Urban rescues, a category that includes very diverse interventions such as rescues in lifts, help for healthcare staff for the transporting of patients, accidents at work, etc., has involved 222 call-outs.

The interventions for attempted suicide deserve a mention, having exceeded 100 call-outs for the first time, practically doubling the number of call-outs from the previous year (58 in 2021). Part of this increase is due to a better classification of the interventions, having updated the suicide attempt procedure that had been in force since 2016, including a new rescue mattress, but another part corresponds to a real increase in interventions of this type.

The rest of the rescues correspond to search and rescue actions in collapsed structures (BREC) which in 2022 have been in presumably empty small structures (4 call-outs), accidents with dangerous goods (3 call-outs) and two surface water rescues.

5.3. Technical Assistance

Technical assistance includes all the interventions in which, without there being an imminent risk to people, property or the environment, specialist technical resources are required to avoid unfavourable developments.

The most numerous call-outs in this group include those for the removal of hymenoptera and trees (the change in the classification of call-outs will allow discrimination between these two types). In addition, the structures of 376 buildings have been made safe, 291 prevention checkpoints employed along with 139 due to leaks or possible gas leaks, among others.

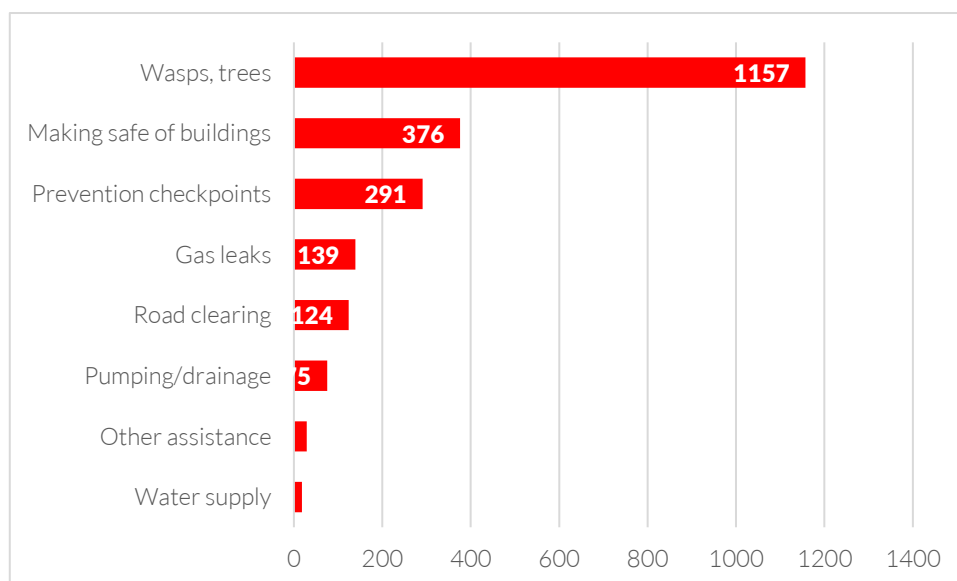


Figure 16 - Number of technical assistance call-outs according to type of intervention

Most interventions for gas leaks (85% of the total) have been in situations in which the existence of a leak was not confirmed.

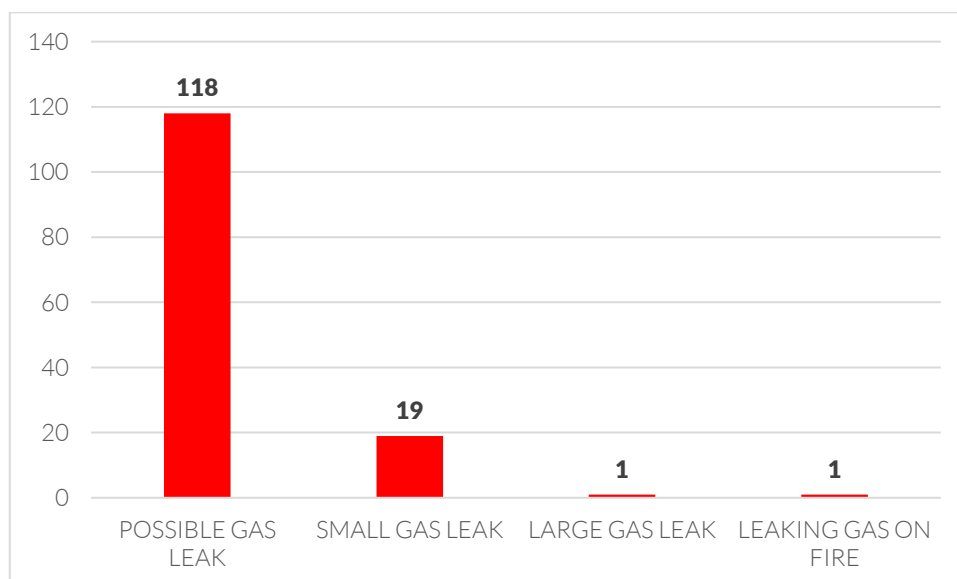


Figure 17 - Gas leak call-outs in 2022 by type

6. Prevention

Beyond responding to emergencies that occur on a day-to-day basis in the Historical Territory of Bizkaia, the SPEIS belonging to the DFB also works daily to prevent these emergencies from occurring and so that, if they do occur, the personal, material and environmental consequences are minimal.

This activity is carried out by the Fire Prevention Section whose function is to plan and promote actions aimed at minimising risks and increasing safety with respect to fires and other dangers in the Historical Territory of Bizkaia.

This section is made up of three technicians: 1 officer and two deputy inspectors, who combine the technical and operational tasks, although all levels of the service participate in many preventive actions.

Prevention activity in the Bizkaia SPEIS can be classified into three different fields: operational prevention, technical advice and public awareness.

6.1. Operational prevention

We call operational prevention the actions aimed at those affected and those who intervene so that they are aware of the existing risks and dangers and the guidelines for action in the face of foreseeable emergencies, in this way minimising their consequences.

To this end, a series of meetings have been held with personnel from various administrations, and emergency response planning has been carried out in collaboration with different institutions, with the aim of providing assistance both to external organisations and to the service itself.

Also, with regard to participation in projects at a European level, the Prevention section has participated in 2 proposals, which are pending approval by the European Commission. It has also participated in the EUFireStat project.

Operational Prevention Sheets

The Operational Prevention Sheet (FPO) is a support tool for emergency teams whose objective is to guarantee precise operational information in a clear and simplified manner to those involved in an emergency situation in places that may involve special risk or vulnerability.

The Fire Prevention Service has maintained contact with various companies, public and private organisations with special risks, to study the risk posed by their activity.

As a result of this collaboration, in the year 2022, a total of 13 FPOs have been prepared that will increase the effectiveness and safety of emergency teams by reducing the consequences to people and property in possible interventions in which the Fire Service participates. Specifically, these are:

- *Gaztelua tunnel*
- *Seberetxe tunnel*
- *Arnotegi tunnel*
- *Aludium*

- *Flotamet*
- *Carbueros Metálicos*
- *Alstom*
- *Bridgestone Basauri*
- *Cemosa*
- *Haizea Wind*
- *Repsol*
- *FAES FARMA*
- *Winoa Iberica*

Progress has also been made this year in the proposal that was made to the Office of Emergencies and Meteorology from all the SPEIS of the Basque Country, at the initiative of this service, to include the FPO of regulated activities in the Register of Self-protection Plans.

Maintenance of the database

The updating of the cartography available in the stations has continued.

During 2022, various hydrant check-up actions have been carried out, the purpose of which is to guarantee their operability and in the event of verifying their malfunction, notify the municipalities, companies or the Bilbao-Bizkaia Water Consortium of the incidents detected to achieve the proper maintenance of facilities. The meetings held with the Erandio Town Council Civil Protection technicians in this regard are worth highlighting.

The database of the Operational Prevention Sheets for the different companies and tunnels has been updated, and its incorporation into the IpSige emergency management programme, with priority information to be used in an accident in real time, will help decision-making.

Similarly, accessibility to the municipalities of Lekeitio, Markina-Xemein and Ondarroa has been studied and mapped.

Communication of incidents to the Social Services

As soon as the Prevention section becomes aware of a case that occurs in a SPEIS intervention that it is believed requires the knowledge or mediation of the municipal social services, they are immediately notified.

In 2022, various follow-up activities for borderline situations identified in certain interventions (Diogenes syndrome, abandonment situations, etc.) have been completed.

Visits to specific risk locations

In coordination with the station heads and sergeants, a total of 15 preventive visits have been made to various companies that have activities that involve risks, in order to learn about the first intervention areas of the 8 fire stations.

Special mention must be made of the organised visits to the towers in Calle San Bartolomé in Barakaldo in February, and the hydraulic tests carried out in these high-rise buildings.

Technical visits from the Prevention section have been made to the following sensitive locations:

- *Cemosa*

- Lointek
- CIE Automotive
- Flotamet
- Loiu Airport: new building
- Serrats
- Building Los Baños 45-47 (Sestao town hall technicians)
- Bilbao Metro installations (Artaza)
- Gorrondatxe-Barinatxe cliffs
- Tubos Reunidos (Valle de Trápaga-Trapagaran)
- Torrelarragoiti industrial estate
- Markonzaga Health Centre (Sestao)
- Old Dow Chemical plant
- Gernika-Lumo town hall “Last Monday” market
- Forest of Oma
- Turtzioz-Trucíos town hall
- Faes Farma
- South Metropolitan Bypass (new Seberetxe and Arnotegi tunnels)
- Abandoned house in Ermua
- Derio (San Miguel Plaza-marquee) City council technician

Similarly, intervention procedures have been carried out in underground garages in the facilities ceded by the Sestao Town Council in the months of March and April.

Drills

The periodic performance of drills with the activation of the emergency or self-protection plan aims to create organised and operational response habits in the emergency services through practical training.

Drills allow service personnel to become familiar with an intervention and learn about the risks and characteristics of the buildings and facilities where they are carried out.

In most cases, after the drill, a series of deficiencies are identified and the introduction of improvements is proposed both in the established procedures and in the resources and facilities.

In 2022, the Fire Service has participated and collaborated in a total of 12 drills, including:

- Bizkaia Energía Boroa thermal power station
- Bilbao Airport
- Haizea Wind
- Petronor
- Carbueros Metálicos
- Max Center
- South Metropolitan Bypass Arraiz tunnel
- Wildland fire in Betolaza (Araba)
- Gaztelua tunnel
- Weylchem Bilbao

- Ineos Sulphur
- Barakaldo towers

Other actions

In another area, conversations have been held with the University of Deusto to integrate into the final year degree and master's degree projects subjects of interest for the operation and safety of firefighters.

The Ispaster training area renovation project has also started with the organisation of a meeting of experts in installations of this type in the month of May.

The technicians of the Prevention Section have participated as speakers in various professional conferences (Albacete, Valencia, Béjar, etc.) contributing their knowledge to the professional group as a whole.

6.2. Technical prevention

The Fire Prevention Section provides advice, resolves queries and writes technical reports for administrations, companies and, exceptionally, private technicians.

During the year 2022, 22 advisory reports have been provided to companies, technicians, town halls and other administrations on construction solutions, application of regulations in special situations, fire protection, etc.

6.3. Citizen awareness

The Prevention Section plans and carries out didactic, training and information activities aimed at different groups, companies and institutions, with the aim of promoting the prevention of different risks and teaching how to react in an emergency.

Visits to fire stations

Although to a lesser extent than previous years, the year 2022 has been marked by the limitation in interpersonal relations imposed by the COVID-19 pandemic. Regular visits by schools and other groups to the different fire stations have been very restricted and it has not been possible to attend to all the requests received.

Prevention training sessions

The talks on fire safety regularly given to various groups have been resumed. Specifically, the following training sessions have been given:

- Course to the Ermua Municipal Police
- Talk to San Jose Carmelitas school (2 days)
- Talk to the Association of bakers of Bizkaia
- Prevention sessions Tartanga school (3 days)
- Prevention Sessions in Bermeo
- El Salvador Firefighters talk
- Course PC Erandio, PL Erandio, PC Barakaldo
- Sasoiko course University of Deusto

- Participation in television programme Orbita Laika
- Participation in EITB Jaia, BEC Barakaldo
- Bonfires of Saint John: Prevention posters in the municipalities of Bizkaia

At the request of the College of Civil Engineers, on 20 January the module “The practice of evacuating people with disabilities from a building” was given, aimed at professionals in construction design and the third sector within the Basque Country Universal Accessibility Course CAUE 21-22.

The professional guidance talks for students in secondary schools have also continued and three training days have been given to the students of the CIFP Tartanga LHII integrated vocational training school, with a theoretical module that includes demonstrations and a practical module to learn about the development of a fire and the use of fire extinguishers. The same has been done with the CIFP Construcción (Sestao).

Also, within the framework of the “Ezagutu” programme of the Txorierri colleges, the professional orientation days for secondary school students have been resumed and all the students who have requested them have been received at the Artaza fire station, to explain what the job entails and how to access the profession of Firefighter.

The Prevention Section has coordinated cooperation with the Arkaute Police and Emergency Academy in the training of newly recruited police officers. More specifically, they have been trained in procedures for intervention in fires, traffic accidents and situations involving dangerous materials, as well as in the use of fire extinguishers. Meetings and training sessions have also been held with the Ermua Local Police.

Citizen awareness campaigns

In 2022, citizen awareness campaigns that address the daily risks that citizens face have been carried out via radio, social networks and through the distribution of brochures and posters.

Continuing with the actions initiated on the occasion of the 50th anniversary of the creation of the service, various in-person events have been held in different town halls of Bizkaia.

Similarly, citizen education actions have been maintained through the media, mainly with various appearances in the press and on the radio. This year special attention has been paid to the prevention of accidents at the bonfires of Saint John, with letters to all the town halls and the placement of posters in the planned locations.

Finally, it has been possible to resume support for the activities planned for the Day of Fire organised by the Bermeo Town Council on 11 November, with an important display in the town hall square where several hundred schoolchildren pass by.

In the year 2022, the project “Be Fire Safe at School” has been brought to a close. The pedagogical contents for all the presentations and didactic videos aimed at education in fire protection have been completed and the online application has been ready and available free of charge to the entire group of secondary school teachers and students, translated into seven languages, including Basque and Spanish. In this European project, framed within the Erasmus+ Programme, the Prevention Section of this SPEIS has actively participated.

We have also participated in the presentation and collection of an international prize in Dublin, in the month of March.

A citizen training campaign has been designed on “how to prevent and how to act in the event of a fire”, by placing informative posters in lifts throughout Bizkaia. This campaign will run throughout the year 2023.

The “Órbita Laika” scientific programme on TVE2 invited us to participate in the recording of a programme dedicated to fire, in which we were able to disseminate the basic principles to minimise the effects of a fire. It was broadcast nationwide on 11 October.

PIN 22-23

This year, after the pandemic, it has been possible to bring back the fire stand in the Christmas Children’s Park. Once again it has been one of the most visited among the institutional attractions and, without a doubt, one of the most highly valued. It has had the participation of more than 50 professionals and some 10,000 boys and girls have visited, learning the basics of fire safety and the ins and outs of the work of firefighters.

7. Training

The SPEIS has a training section made up of two deputy inspectors and one officer, and reporting to the Prevention, Training and Civil Protection Section, which coordinates the training of newly recruited personnel, as well as on-the-job and career training for the people who make up the service and the activity of the different work groups and instructors.

7.1. Training of new recruits

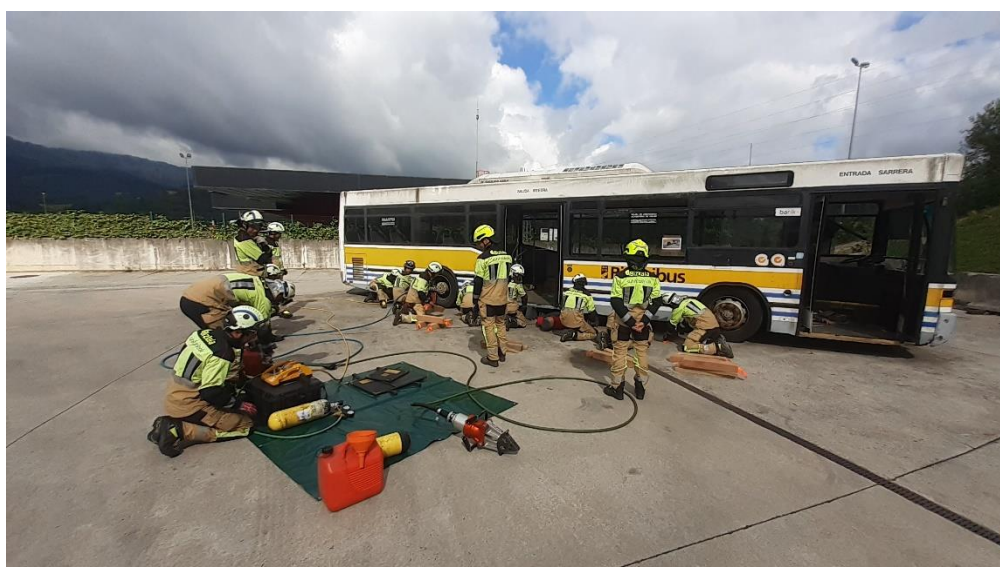
In 2022, two academy courses for the firefighter category have been carried out, with 24 recruits in each. These people have joined the SPEIS job pool.

The course lasts 420 hours and is approved by the Basque Academy of Police and Emergencies, so it is training that is a prerequisite for working in any of the six Prevention, Fire Fighting and Rescue Services belonging to the Basque public administrations.

7.2. On-the-job and career training

A total of 764 hours of on-the-job training has been given to service personnel in the following courses in order to maintain the necessary skills to intervene effectively and safely:

- Development and control of structural fires
- Rescue in heavy vehicles and lifting and stabilisation of loads
- Access to and location of victims Tracking and smoke diving techniques
- Rescue in the natural environment
- Intervention in suicide attempts (for corporals)
- New fire intervention procedures (for senior officers)
- Command in wildland fires
- Command and control (advanced control post exercises)



In addition, BIZKAIA PREST operating personnel have received training related to:

- New work protocols and regulations for Bizkaia Prest
- New fire intervention procedures
- New call-out tree and updates to the IpSige tool

In addition, half of the watch commanders (deputy inspectors) have received the unit commander (command and control) course at the ENSOSP (École Nationale Supérieure des Officiers De Sapeurs-Pompiers).

7.3. Station drills

Each day, the SPEIS watch staff carry out drills following the calendar established by the service training area.

In addition, the following guided drills by service instructors have been carried out:

- Incidents with dangerous goods
- Emergency medicine
- Action in suicide attempts
- Forced entry

Special fire drills in underground garages have also been organised (in which the teams of Urioste and Zalla have participated) along with a joint manoeuvre of the teams from Basauri and Iurreta in which they have put into practice procedures to track and rescue victims in atmospheres flooded with smoke, communications, command and control, etc.



During 2022, an analysis of the current situation with regard to the drills has been made and a new manoeuvring procedure and a new manoeuvring catalogue has been developed that will be progressively rolled out during 2023.

7.4. Ispaster training area

During the year, a total of 19 fire extinguishing courses have been carried out, in the ISPASTER training area.

In addition, a total of 158 recycling courses have been carried out by various institutions.

7.5. Working groups

The service has 12 active working groups, in which operational personnel of all categories participate as instructors and collaborate in the elaboration of procedures, choice of equipment, etc.

In 2022, the service has addressed the training of these personnel as instructors to homogenise the pedagogical method used. The course "Training of trainers - For1" has been run twice and "Training for Pedagogical Coordinators - For2" once, and the coordinators of several working groups have participated.

During 2023, the carrying out of at least another For-1 course has been scheduled with the objective that all personnel collaborating as an instructor have received the corresponding training.

Various "technification" courses have also been carried out for the instructors of the different working groups.

7.6. Participation in events

The instructors of the working groups and controls have participated in various congresses and professional events during 2022:

- ENRAT (Rescue in Traffic Accidents National Meeting)
- Rescue Sevilla
- Rescue sessions in Toledo
- Sessions in Béjar
- Rescue days in Alcañiz
- Fourth Workshop of the Structural Fires Group (GIE)
- ORP Firefighters Congress
- Interschutz
- SICUR
- IEDO

Congress

8. Logistics and vehicles

The technical-administrative section manages the logistics and vehicles units and is responsible for maintaining the material resources of the SPEIS.

8.1. Logistics unit

The logistics unit is composed of an officer, two maintenance assistants, an administrative assistant and an external service for the maintenance of special equipment. Logistics manages the SPEIS warehouses, acquisitions of material resources and both preventive and corrective maintenance of the different equipment (except vehicles).

3247 requests for assistance from the stations have been resolved. These include requests for consumables, clothing, lost and deteriorated materials, etc. They have been distributed by station as follows:

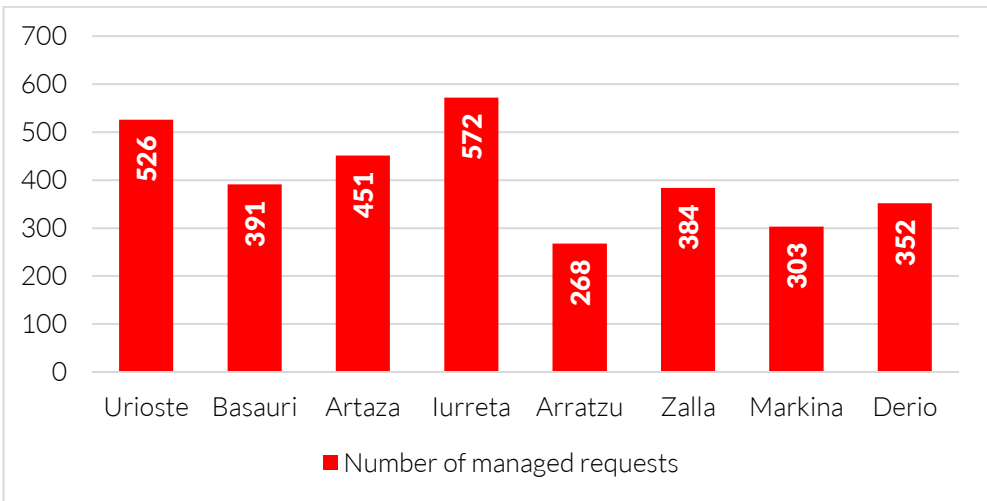


Figure 18 - No. of requests for assistance resolved by the logistics unit (by station)

Regarding corrective maintenance, a total of 340 equipment repairs have been successfully carried out during the year. 69 of them have been carried out by personnel from the unit and the remaining 271 through external suppliers.

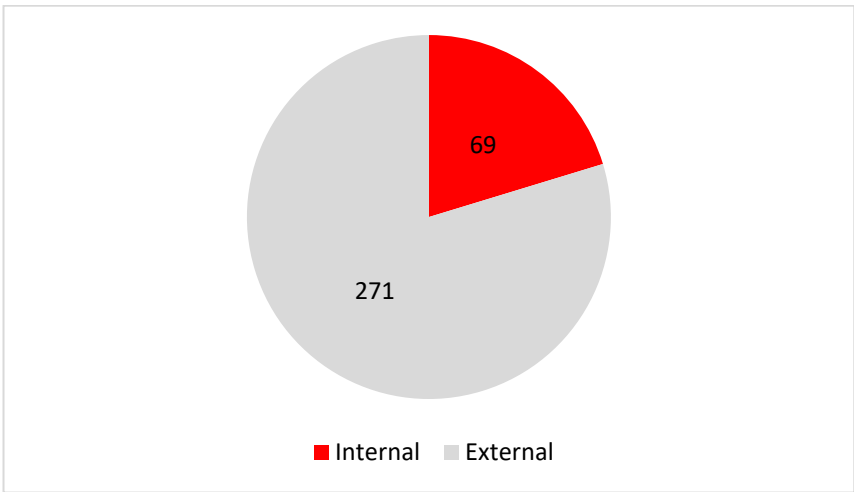


Figure 19 - Distribution of repairs made in the logistics unit

These repairs have covered virtually all types of equipment available in the SPEIS, distributed as follows:

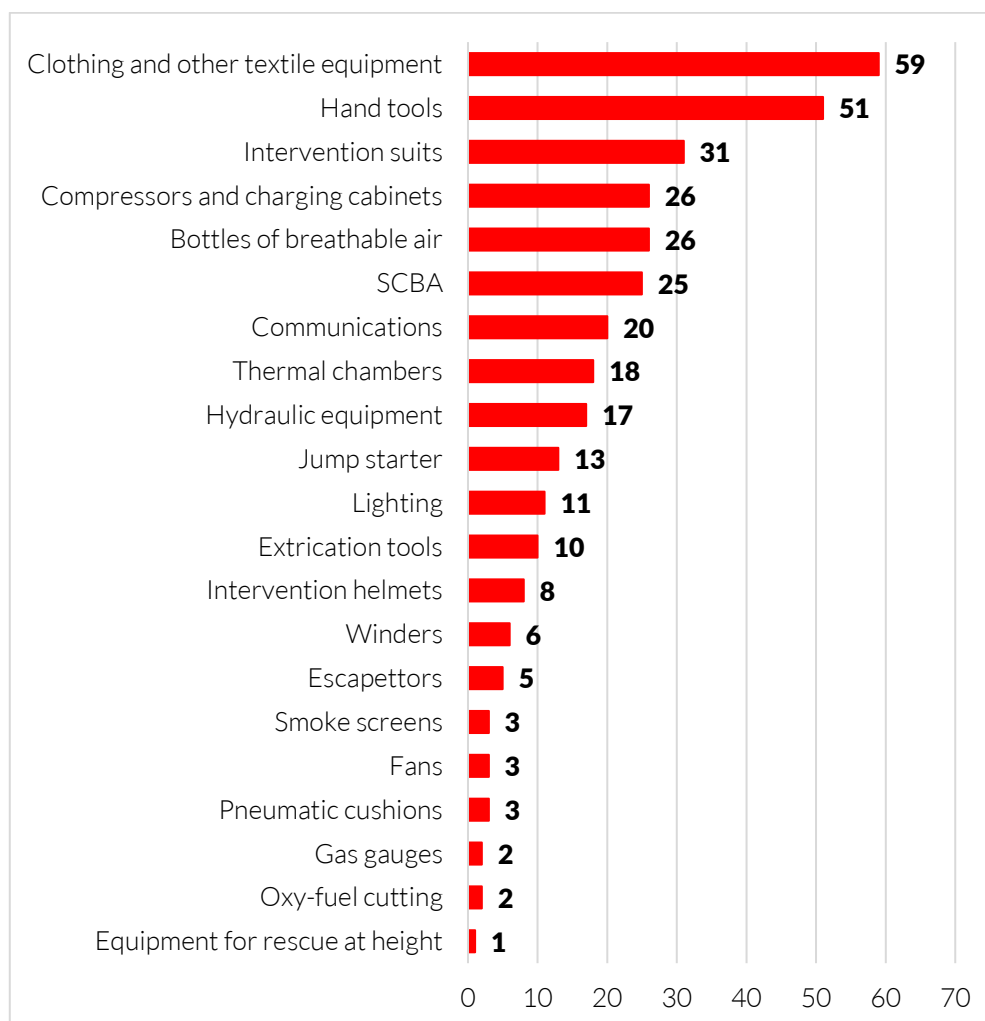


Figure 20 - Managed repairs by type

In addition, the unit is responsible for the preventive maintenance of equipment according to the work plan established by an equipment preventive maintenance procedure. During 2022, preventive maintenance has been carried out on the following equipment, though this is not an inclusive list:

EQUIPMENT	MAINTENANCE CARRIED OUT
Masks	782
Harnesses	155
Regulators	168
Bottles of breathable air	366
Breathable air compressors	11
Level 3 chemical protective suits	15

:

8.2. Vehicles unit

As of 31 December 2022, the SPEIS vehicle unit manages a fleet of 100 vehicles formed by 63 heavy vehicles and 37 light vehicles, as well as 40 trailers and containers of different types, distributed between 8 fire stations and 5 stations of volunteers and civil protection volunteers.

Throughout 2022, a total of 333 requests to the workshop for action have been managed, distributed as follows:

Group	Items	Quantity
Group 1	Saloons, off-road vehicles and vans	52
Group 4	Automotive and towing service machinery	2
Group 5	Trailers	9
Group 6	Trucks and crane trucks	36
Group 7	Pumper trucks (BUP and BUM), vans with tools and ladder trucks from the SPEIS of the DFB	139
Group 8	Cleaning and disinfection of vehicles	95
TOTAL		333

60 changes of tyres and fixed punctures, 141 ITV (mandatory vehicle inspection) appointments and 143 programmed maintenance tasks have been managed, distributed as follows:

	BUP	BUM	BNP	BFP	AEA	FUV	GR	TT	Light	ITUR	TOTAL
Chassis maintenance	13	2	7	7	6	6	2	13	5	3	
Allison automatic gearbox maintenance	11		4	0	6	2	1				
Ladder maintenance					10						
Crane hook maintenance							2				
Pump maintenance	18	2	7	10						6	
Subtotal	42	4	18	17	22	8	5	13	5	9	143

The refurbishment and improvement of several vehicles has been managed, including:

- Adaptation of the distribution of the U7 cabinets.
- Remodelling of the B8 (Relasa, Spain) and the B5 (Jacinto, Portugal).
- B1 repair (Spain - Portugal).

During the interventions in wildland fires in Balmaseda and Zalla, the F1 forest vehicle was caught in the mountain in one of these, being totally burned out. The recovery work was managed along with the utilisation of the parts that could be used in other vehicles.

Work is being carried out on the implementation of a new computer development for the management of vehicles and their incidents, and other activities, which is scheduled to be operational in the second half of 2023.

9. Procedures and investigation

The SPEIS has a procedures unit, made up of two sub-inspectors and one official, and dependent on the Prevention, Training and Civil Protection Section, dedicated to the analysis of accidents and the preparation and implementation of the procedures that determine the guidelines for action in the SPEIS.

9.1 Procedures and protocols

During 2022, 18 procedures have been approved, prepared by the procedures unit with the collaboration of the SPEIS working groups in which personnel from all categories participate:

SOP Structural fires

Operating procedure that determines the classification of fire interventions in buildings (residential, commercial, public, etc.), the automatic mobilisation of resources and the guidelines for action by the intervening crews.

SOP Industrial fires

Operational procedure that determines the classification of fire interventions in industrial environments, the automatic mobilisation of resources and the guidelines for action by the intervening crews.

SOP Outdoor fires

Operating procedure that determines the classification of outdoor fire interventions (vehicles, containers, small transformation centres, etc.), the automatic mobilisation of resources and the guidelines for action by the intervening crews.

Fire operational guide

Document annexed to the fire operating procedures in which the techniques to be used in fire interventions are determined.

PGP Use and checking of resources in the station

Procedure that organises the resource checking guidelines in the stations to achieve homogeneity and efficiency in the checking of the different equipment and resources available in the stations.

PGA Analysis of interventions (RETEX)

Procedure that determines which interventions are likely to be analysed by the procedures unit, how this analysis is carried out and how the results are shared with operational personnel (feedback on the experience).

PGP Use and checking of REDA (hard-to-access area) equipment

Procedure that establishes the equipment for work at height available in each station and the guidelines for its use and methodical checking.

PGA Organisation of the logistics unit

Procedure that establishes the internal system of organisation and operation of the logistics unit of the SPEIS.

PBP Alarm management in Bizkaia Prest

Procedure that determines the guidelines for action for the operators of Bizkaia Prest to manage alarms received from 112, police, individuals, etc., mobilise the corresponding resources and manage interventions.

PGP Personal equipment

Procedure that establishes the personal equipment of the operating personnel and the basic guidelines for its use.

PGP Use of fire extinguishers

Procedure to standardise the distribution, use and replacement of fire extinguishers in the facilities and vehicles of the SPEIS.

PGP Use and checking of replacement vehicles

Procedure to establish the distribution and usage patterns of the replacement vehicles available to the SPEIS.

SOP Wildland fires

Operational procedure that determines the classification of wildland fire interventions, the automatic mobilisation of resources and the guidelines for action by the intervening crews. It includes a coordination protocol with the resources belonging to the Department of Sustainability and the Natural Environment.

SOP SCBA container use and checking

Procedure that determines the provisions, functions and guidelines for use of the respiratory equipment container incorporated into the SPEIS at the beginning of the year.

SOP Lighting in interventions

In 2021, the homogenisation of lighting capacities in all the stations and extra means of support was addressed. This document includes all the lighting capacities of the SPEIS and the criteria for its use.

PBP Activation of code 10

Code 10 is that situation in which there is the possibility of a violent situation in the short term (for example, during inspections by personnel belonging to the Department of Sustainability and the Natural Environment). This procedure determines the guidelines for action in Bizkaia Prest to adequately monitor the actions and coordinate, if necessary, with the Ertzaintza.

PBP Activation of the orange button

The SPEIS TETRA communications equipment and the Department of Sustainability and the Natural Environment have an orange button to provide notification of emergency situations (accident of the personnel intervening, disorientation, etc.) This procedure determines the guidelines for action in Bizkaia Prest to carry out the appropriate management for these emergency situations.

SOP Intervention in suicide attempts

Updating of the SPEIS operating procedure for interventions in suicide attempts. The original document had been approved in 2016 and this update includes the use of the rescue mattress incorporated into the SPEIS.

PGA Control of documents

Management procedure that determines the system for adequate control and recording of the internal documentation of the Sub-directorate (procedures, instructions, manoeuvres, etc.).

At the end of the year, there were another 14 operational and service management procedures in a different phase of preparation in this area.

Updating of the call-out taxonomy

The SPEIS has a taxonomy to classify the interventions, called the call-out taxonomy. This tree is used to determine the initial mobilisation of personnel and resources, the levels of command, the operating procedures to be applied and, finally, it allows the obtaining of statistics for analysis.

This call-out taxonomy had evolved since its creation in the 1990s, incorporating new types of intervention and classifications at different times.

During 2022, an analysis process started in 2021 has been completed, which has led to the creation of a new call-out taxonomy with a simpler, clearer taxonomy and adapted to current operating procedures. The application of the new call-out taxonomy implies a new classification for some types of call-out.

The new call-out taxonomy will be applied from 1 January 2023 to avoid breaks in the statistical series during the year, although some of its main changes have already been mentioned throughout this document.

9.2 Analysis of interventions

As previously mentioned, during 2022 a new procedure was approved in the SPEIS to systematise the analysis of interventions and the feedback on the experience (RETEX) to operations.



During the year, analyses of the following interventions have been carried out:

- TPC (transport of dangerous goods by road) in tunnel in South Metropolitan Bypass
- Fire at Galdakao Hospital
- Industrial fire (Basauri)
- Fire in fish market (Muskiz)
- Fire in brewery (Berango)
- Transformer fire
- Fire in dealership (Erandio)
- Fire in community garage (Durango)
- Industrial fire (Erandio)
- Accident during extinction in abandoned building (Zaratamo)
- Industrial fire (Sondika)
- Wildland fire (Zeberio)
- Industrial fire (Port)

The results of these interventions have been shared and discussed in four meetings with middle and higher managers and have been made available to all staff on the SPEIS intranet.

9.3. Investigation of fires

During 2022, managers from the Procedures unit have continued to receive training in the investigation of fires at the Basque Academy of Police and Emergencies together with agents from the Scientific Police and managers from other SPEIS.

9.4. Preparation of reports

The procedures unit prepares intervention reports at the request of individuals, police, town halls and courts, among others. During 2022, 333 reports have been issued.

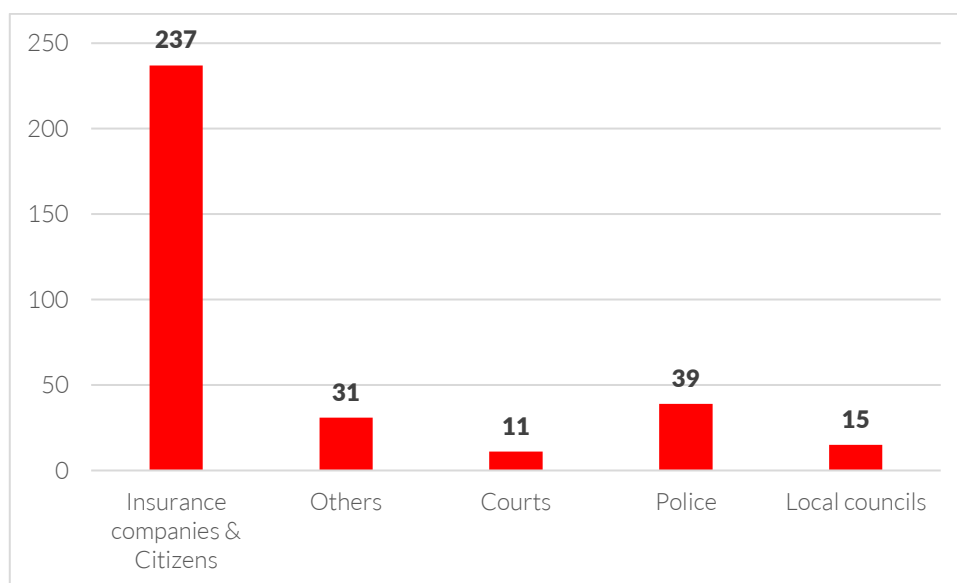


Figure 21 - Reports made in 2022, by type of petitioner

The average response time was 5.8 calendar days. 73% of the requests have been resolved in less than a week, and only 13% have taken more than two weeks. All these delays have been due to the fact that they were particularly complex interventions or investigations in which the necessary data was missing, which required the gathering of additional information from the personnel involved.

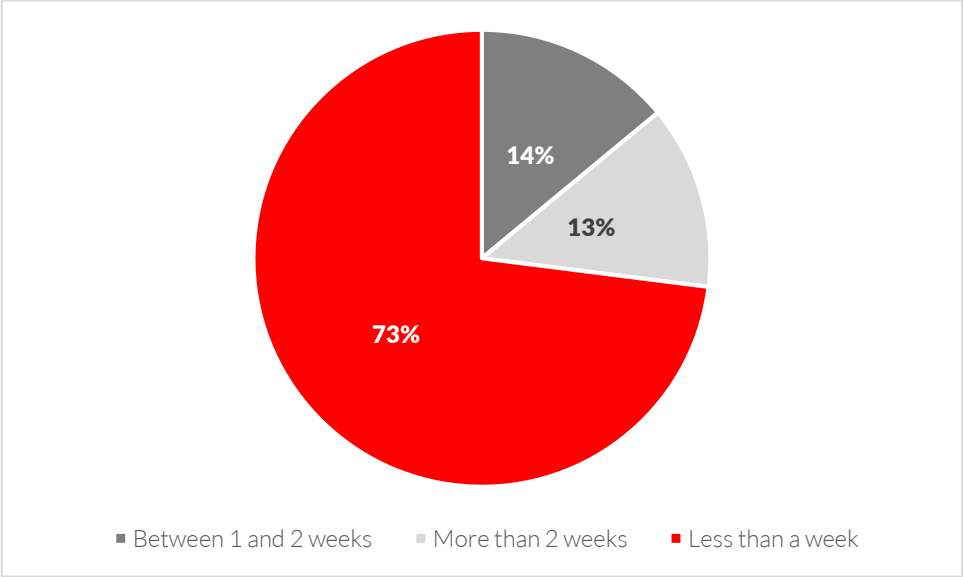


Figure 22 - Response time to requests for reports

