

2019 Management Report

Barcelona Fire Brigade



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1.1. Recognition

This year saw the Fire Brigade continue its involvement in the **Municipal Services Survey** coordinated by the City Council's Municipal Data Office and conducted during the last quarter of the year. This survey, which is based on 6,000 personal interviews, is an essential tool for finding out how the general public rates the public services available to them.

The result obtained for the Barcelona Fire Brigade (8.1 out of 10) shows the high regard that city residents have for the service. This is the highest score out of the 26 services assessed, above the scores for public libraries (7.9) and community centres (7.6). In addition, 30.8% of the respondents were of the opinion that the service had improved in the last year.

To continue in this line, the data-management system is being improved to centralise all the information on the Service and thereby bring about a single corporate image, unifying prevention and awareness-raising messages. The aim then is to have more transparency in the service and to better showcase our values, the events we take part in or organise, and other activities.

On the other hand, the Fire Brigade was handed the **Barcelona Key Award** on 26 March. Els Amics de la Clau de Barcelona [Friends of the Barcelona Key] is a club consisting of business people and set up to pay homage to individuals whose efforts and work contribute to Barcelona's good name, by awarding them key-shaped trophies.

This was the first time in the more than five decades of history of this award that it went to an institution rather than a person.

The Chair of the Amics de la Clau de Barcelona specifically highlighted that the decision to lend this distinction to an institution such as the Barcelona Fire Brigade had even required a change to the club's articles of association, 'a change that was made unanimously, given that everyone on our governing board agreed that it was a totally merited distinction. As Barcelona residents, we can be proud of having such a service'.

1.2. Day events and outreaching

Day event on Fire Safety in Hospitals and Residences

Safety in the event of fires in hospitals and residences was the central theme of the day event held on 14 March at the Espai Bombers, co-organised by the Barcelona Fire Brigade

and the Catalan Fire Safety Cluster (CLUSIC). It was moderated by the coordinator of the Espai Bombers Work Group and a member of the CLUSIC board. The goal was to highlight the challenges these types of centres have to deal with. More than 80 people took part in it.

The day event consisted of two parts. The first focused on the complexity of managing emergencies in hospitals and old people homes and the reality that often occurs unnoticed: every year, fire fighters carry out between ten and twelve responses to hospitals or care homes. On the other hand, the Head of Safety at the Vall d'Hebron hospital spoke about managing safety there, the largest hospital campus in Catalonia.

The second focused on the main aspects that have to be taken into account when dealing with a correct interpretation of issues relating to fire prevention and protection and which have to be taken into account in the facility project.

The main tools and systems at hand for preventing or minimising the effects of a possible fire were gradually explained later on and the importance of good maintenance was discussed at the final part of the exhibition.

The day event included several discussions which those attending keenly took part in.

'Women in Fire Brigades: a gender perspective' day event

The Auditorium at the Barcelona Activa Technology Park, in the Nou Barris district, played host to the 3rd 'Women in Fire Brigades: a gender perspective' day event. The day event represented a great opportunity for putting on the table the difficulties and obstacles that women have to overcome, still, to achieve the desired equality, despite all the big advances over the last few years.

During the presentation of the day event, the Councillor for Feminism and LGBTI Affairs at Barcelona City Council emphasised that 'despite the very unequal presence of women in many professions, we need to continue fighting so we can practise the professions we want. Even if we've only taken the first few steps towards real and effective equality'.

For his part, the Director of the Fire Prevention, Extinction and Rescue Service (SPEIS) underscored the message that 'we have to combat the stereotype of what it takes to be a fire fighter, which has nothing to do today with what was required 30 years ago. That's why we need to transform the selection process so that in five or ten years' time the reality will be different'.

During the talks and round tables that followed, the women taking part agreed on most of the ideas: a woman always has to prove herself more than a man does; a lot of work has to be done to adapt fire stations to a reality designed solely from a man's perspective; technical training is becoming more and more important than physical preparation; the

content of the admissions test programme ought to be revised and the invisibilisation of women's work etc. fought against.

Other speakers at the event included the Inspector at the southern Finnish Fire Extinction and Rescue Service and Chair of the Women's Commission at the International Association of Fire and Rescue Services (CTIF); a woman fire fighter for the last ten years with the Barcelona Fire Brigade and the Safety and Prevention manager.

The woman fire fighter from our service acknowledged in her talk that '[...] there has been a notable change since 2005, but it's very slow and we still have many barriers to break down. But I'd like you to go away on a positive note; you are all brave women who can achieve whatever you set yourselves', she said, as she addressed an audience that filled the auditorium and which was mainly made up of young women with a vocation to become fire fighters.

Finally, a round table entitled 'Being a woman fire fighter' was held, moderated by a woman officer from SPEIS and the first woman shift leader at the Barcelona Fire Brigade. She shared her impressions at the round table with two other colleagues, one from the Catalan government's Fire Brigade – who highlighted how 'we men and women make up a team; whatever I'm unable to do, you will do' – and a forest fire fighter from the Autonomous Community of Valencia, who emphasised how 'very import our attitude to work is'.

Meeting of the Commission for Women in Fire and Rescue Services

Barcelona played host from 11 to 13 November to the 16th meeting of the CTIF Commission for Women in Fire and Rescue Services (International Association of Fire and Rescue Service).

The goals of the Commission for Women in Fire and Rescue are to ensure the fire fighting and rescue services are inclusive for everyone, improve working conditions for all women in these services and make fire-fighting and rescue services more attractive. The aim then is to ensure that women apply for and become operational fire fighters and continue to receive support to keep themselves in this profession, while learning from the various experiences, gathering the best practices and encouraging more countries to become active members of the Commission.

Discussions were held throughout the meeting on the role of women in the prevention, extinction and rescue services, their promotion to leadership positions and the strategies for promoting women's access to fire and rescue services.

Attending the commission during the first, more institutional day at the City Hall's Saló de Cent were the Deputy Mayor for Prevention and Safety; the municipal manager at Barcelona City Council, the manager for Prevention and Safety.

Their talks were followed by a speech from the Chair of the CTIF Commission for Women in Fire and Rescue Services, a Finnish woman, who highlighted the importance of this commission as a meeting point 'to inform one another, exchange tools and provide each other with mutual support'.

The last day of the meeting saw the women fire fighters take part in a chemical accident drill at Barcelona's Port, which was attended by the Deputy Mayor for Social Rights and Feminism.

'Don't invite a fire into your home' campaign

The campaign launched in November entitled 'A casa, no convidis el foc' [Don't invite a fire into your home] was intended to promote the installation of smoke detectors in households to prevent victims in house fires in the city.

Detectors are a cost-efficient option, simple and effective in detecting fires. They are easy to install, do not require previous work and are powered by a battery. That is why the campaign is also aimed at promoting a regulatory change for installing such devices in newly built dwellings and to encourage their installation in other households, in line with what is already happening in other European countries.

The two key messages of the campaign were as follows:

- **Outreach.** To explain what stand-alone fire detectors are and do and how they operate and can be purchased. To show detectors incorporated into dwellings as very useful prevention and safety tools against the consequences of fires in the home.
- **Self-protection.** It is important we know, when faced with a fire, what the appropriate response is at all times to prevent risks and personal harm, in addition to having a detector in place for localising domestic fires on time, above all during the night.

Besides responses to emergencies, 'A casa, no convidis el foc' has been boosting collaboration with management agency associations and professional associations of architects, engineers, technical engineers and quantity surveyors, as well as residents', retailers' and old people's associations, etc. through information meetings and workshops aimed at fire-prevention outreaching, knowledge exchanges, discussions and training through prevention sessions.

In addition, some 80,000 leaflets were distributed to fire stations, the prevention classroom, the Espai Bombers and professional associations.

The campaign will continue throughout 2020 and 2021.



Participation in the Education Fair

This was the third time the Barcelona Fire Brigade attended the Education Fair, which in this case was on from 20 to 24 March.

The purpose of the participation was to introduce the service's activity, presenting it as a future professional option, and to explain the work conditions of its professionals and the requirements for taking part in public calls for job applications.

Special emphasis was also once again put on encouraging women to take the recruitment tests. Here a woman fire fighter and the brigade's first woman shift leader took part with their colleagues in providing information and answering queries from visitors to the booth, especially young people aged 16 to 35, who wanted to find out about recruitment conditions and the special features of a fire fighter's tasks.

The booth was visited by a large number of the public during the entire period of the Education Fair. In fact, 2,592 people (1,390 men and 1,202 women) were attended to at the booth (shared with the Guàrdia Urbana [city police]) during the five-day Fair.

At the same time, it was part of the **Youth Employment Fair**. More specifically, on Thursday 21st and on Friday 22nd, a fire fighter at the Descobreix del Saló space told visitors there about his experiences in the brigade. He talked in detail about the recruitment tests work and the technical, physical and merit-based requirements for being

part of the brigade, as well as the reality of its daily work, and he encouraged everyone to take the tests.

The Director of SPEIS was also present at the talks. He spoke to give his assurances to future fire brigade applicants that 'our work has been changing with the times. It is more and more about teamwork and we have to count on all possible profiles, including women. We need more and more of you to take the recruitment tests'.

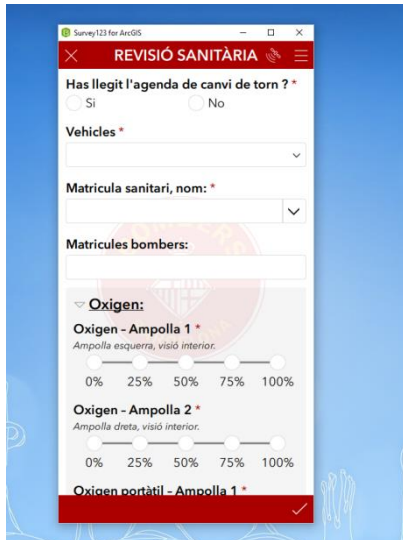
1.3. Mapping

In 2019, the Mapping Service focused its efforts on introducing and implementing a new digital support system (tablets) and on training staff to use those devices and the various applications that make up that environment.

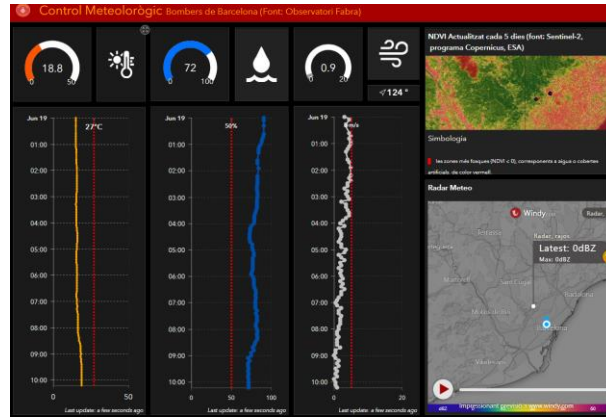
The goals for 2019 followed the work line established in 2017, and the corresponding ones for 2019 involved the full deployment of the tablets and graphic-information routing and consultation applications, as well as the use of those devices to create real-time maps for interconnecting the emergencies-management room and fire fighters to the incident's location.

Some of the projects the SPEIS Mapping Service took part in or has continued to take part in include:

- Training staff to use the tablets.
- Updating the Map Library to version 2.0.
- Implementing the Collector app to gather field data, decentralise the input of data and thereby adapt the maps to users' needs.
- Maintaining the various Barcelona Fire Brigade geo-services used in several apps.
- Introducing geobarriers for automating notifications and alerts.
- Extending the automated notification system to cover fire hydrant revisions, ambulance revisions, unique area service reports etc.
- Introducing the Survey123 app for healthcare-vehicle revisions.
- Establishing a weather-alert system, directly connected to the Fabra Observatory station.

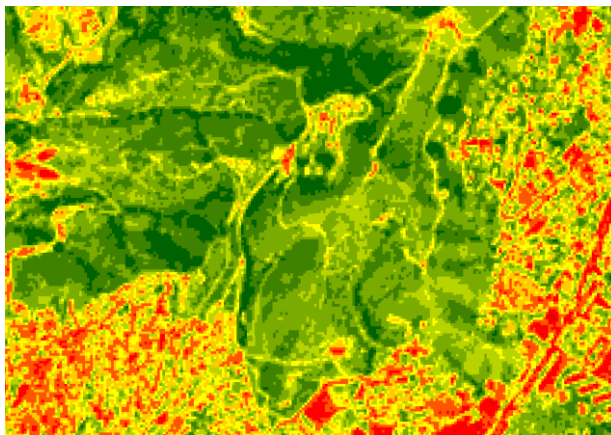


1 snapshot of Survey123



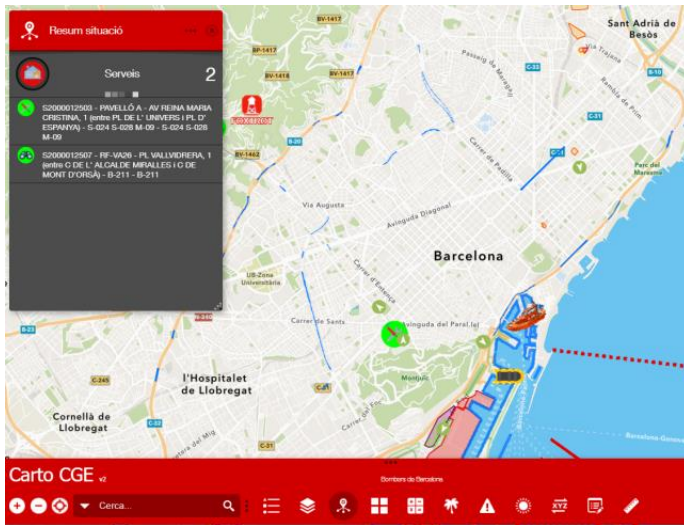
2 New weather-monitoring dashboard

- Periodic processing of satellite images from the ESA Copernicus (Sentinel-2 satellite) programme for putting together the vegetation index during the forest campaign to determine areas at greater risk of fires.



3 Results of the calculation of the normalised vegetation index

- Creating basic tilemaps and maintaining offline maps that are stored in tablets and used as support in areas with a poor internet connection, mainly in Collserola.
- Preparing the new mapping of the city's coastal environment.

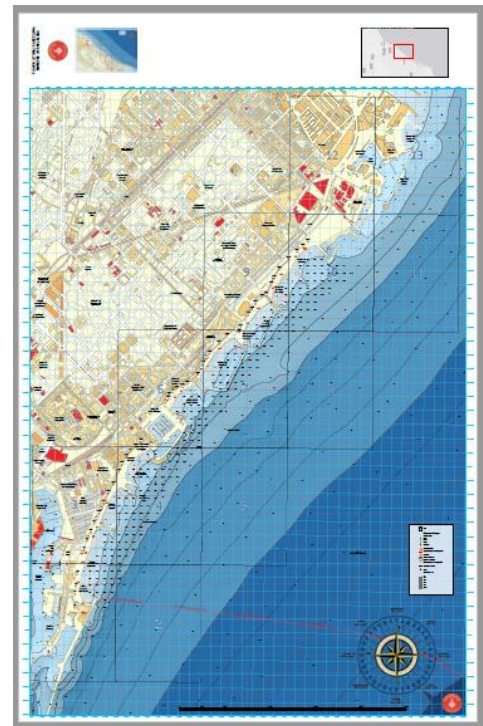


4 *snapshot of the Map Library with the positioning of the tablets*



5 *Karta emergency router*

- Maintaining and updating the Karta router and the emergency routing system so that it includes public works, changes in traffic directions and the various events or sports activities that affect the city's roads.
- Real-time monitoring of the Service's tablets.
- Production/maintenance of operational files.



6 *Mini-map of Barcelona's coastal area*

2 Prevention

2.1. Civil Protection

2019 was a year when tensions and disputes on public highways with mobilisations led to continuous calls in the last quarter for the Civil Defence CECORS [Advanced Coordination Centre for risk events] to monitor them and facilitate the coordination of operational security, emergency and healthcare-service officers. The mobilisations created complex situations owing to the existence of violent groups in the city centre, which had numerous effects on the environment and urban furniture, as a result of the fires started and the hurling of every kind of object. The emergency operations in response to these situations had to be adapted by moving resources on the ground to enable faster and better-coordinated security responses and facilitate the emergency services' actions.

The weather conditions during the second half of the year proved very active when it came to precipitations and there were repeated episodes of extremely intense rainfall during very short periods of time. There were frequent activations of the Drainage Insufficiency, which put to test the joint work carried out with BCASA and with municipal security and emergency operations.

On the other hand, the usual activity of the Civil Defence Unit continued along the 2018 work line, with the maintenance of mandatory PAU report indicators and a notable increase in the monitoring and supervisory work of all the emergency plans in their municipal headquarters, invariably in coordination with the City Council's Occupational Risks Department.

Continuity was given to the Civil Protection Unit's coordination tasks with the Operations Division, and joint assistance in drills at higher-risk companies and other hospital and unique-building activities guaranteed the good level of preparation of the operations and the continuous assessments of these activities' risk levels in the municipal environment.

The heavy work burden arising from the activations of the CECORS to monitor citizen mobilisations as a result of the mobilisations and other monitoring activities such as for the La Mercè Festivities led to a delay in the formalising of the 'Single Civil Defence Document', as stated in Decree 155/2014. We expect to be able to finish this work during this year and thereby ensure the maintenance of operational capacities and improve effectiveness in the activations of the city's emergency planning.

2.1.1. Initiatives in the area of civil protection and self-defence plans (PAUs)

The following initiatives relating to regulation and prevention were carried out over the course of the year:

Self-Protection Plans	285
<ul style="list-style-type: none">• PAUs under City Council jurisdiction (report)• PAUs under Catalan government jurisdiction (reports and submissions)• PAUs under Catalan regional government jurisdiction (without submissions)• Municipal headquarters' emergency plans (87 revised plans)	98 93 94
Reports on projects and events	27
CECORS	21
Fire drills attended	43
Municipal Civil Protection Commission meetings	0
Civil Protection Executive Commission meetings	0

2.2. Fire prevention

This was the year of consolidation as part of the Barcelona Fire Brigade's management of fire prevention from the Common Report Template (MCI). This is the new IT app that helps us to speed up our processing of process mandatory fire brigade reports for public works projects and activities included in the current byelaw on fire-protection conditions.

Specific reference ought to be made to the production indicators' increases between 2018 and 2019, reflecting the city's activity regarding permits for public works and activities. The number of mandatory reports increased by nearly 20%, reaching 689, of which 60% corresponded to activity projects and 40% to work projects, infrastructures and urbanisation work.

It can be seen from all the reports that there was a growing trend in renovation work and changed use of existing establishments and buildings, balanced by a reduction in new construction work. The trend was consolidated over time.

Specific reference should be made regarding the inspection work. It was already notable in 2018 for its extra inspection work and in 2019 for a 15% increase in all the inspections made, reaching as many as 272. Inspections of establishments and activities in operation were consolidated as one of the necessary tasks for checking the development of risk indicators in the city. Mention should be made of the smooth running of the coordination with the districts and Regional Coordination Department when it came to planning these initiatives.

Specific mention ought to be made of the cross-cutting management and joint work of the Regulations Unit and the Civil Defence Unit in coordination with the Department of Infrastructures at the Area of Ecology and Environment at Barcelona City Council, in processing the mandatory reports. The unique nature of projects such as the Plaça de les Glòries Catalanes tunnels, the La Sagrera inter-modal station, the extension of the L8 FGC railway line from Plaça Espanya to Gràcia and the Plaça Espanya intercom required other readings of the current legal framework for fire-protection conditions. In those cases, the justification for compliance with the basic fire-safety requirements had to be based on 'performance' simulation mechanisms (FDS) for the purposes of supplementing traditional mandatory justifications.

Finally, coordination between the Operations Division and the Civil Defence and Prevention Division had become very important in the analysis and inspection of fires. New work lines were opening up for re-interpreting and adapting the legal framework and for adapting prevention and self-protection training initiatives aimed at city residents.

2.2.1. Initiatives on regulations and prevention

	2018	2019
Advice	2,184	2,208
• Visits arranged	687	704
• Telephone queries	1,497	1,504
Reports on work projects, activities and events	583	689
• Mandatory project reports	490	554
• Projects reported to the Environment Committee	30	48
• Reports on events, concerts, 'fire runs', firework displays, etc.	63	87
	236	272

Prevention inspections

• Inspections of firework and bonfire projects	123	143
• Preliminary checks supervised by the Environment Committee	35	18
• Inspections at the request of the Operations Division, the Municipal Authority (districts, manager's offices, Unauthorised Settlements Plan etc.), and the Catalan government Authority	78	111

2.2.2. Prevention Classroom

2019 was an excellent year for the Prevention Classroom, as it could be said it had nearly doubled the number of fire-prevention and self-protection training sessions.

Thanks to the potential of 25 fire-prevention trainers/monitors, a total of 418 training initiatives were carried out, 130 more than in 2018. The training initiatives were performed throughout the year, except in the month of August, a period used for dealing with assessments and recommendations, updating content and preparing the physical space on Floor 0 of the Vall d'Hebron Station, to resume the following school year's sessions.

The range of training offers was extended to include groups of adults and elderly people and here the increase was very large. The number of training initiatives rose from 21 in 2018 to 89 in 2019.

This year, prevention and self-protection training initiatives also extended to other security professionals such as Guàrdia Urbana officers and staff at Barcelona City Council's Tele-Assistance Service.

Of course, the most important indicator year after year was the number of visits arranged under the School Activities Programme (PAE) and its number of offers of specific training initiatives for age groups which this year came to 279, including those from special needs schools.

	2018	2019
Prevention and self-protection training sessions	288	418
Primary schools	228	269
Special needs schools	19	10
Groups of adults and senior citizens	21	89
Other institutions	29	50
Total number of people who attended training and information initiatives	8,118	11,352

These indicators did not include school and citizen visits to fire stations or open-day visits.

The message and experience in fire prevention and self-protection are requested and highly valued by primary and compulsory secondary education (ESO) schools, although there has been an increase in the number of centres teaching graduate and postgraduate courses, of elderly people, of other municipal departments and, much more frequently this year, of social or cultural associations and family groups. Information given out by word-of-mouth from attendees was used for awakening interest among people to find out about the risks we may be exposed to in our daily lives.

The training initiatives highlighted the shortcomings in culture of prevention and mainly self-protection in risk situations. Arguments were given in the classroom, depending on the group attending, with practical advice, service experiences, photos and videos of types of basic behaviour that the population had to have, such as lockdowns and acquiring smoke detectors for dwellings.

2.2.3. Espai Bombers

Visitor numbers to the Espai Bombers are a reflection of the activities planned. Temporary exhibitions and related activities have been one of the most significant and constant poles of attraction over time. Museum Night has been one of the most important attractions year after year, bringing together a very high number of attendees in one night alone. Visits to the museum space and group activities are the complement that rounds off the museum's offers and which reached its high point in 2018.

The temporary exhibition, 'Els bombers i les bombes de vapor. 1826-1920' [Fire fighters and steam fire engines: 1826-1920], in an exhibition format along with lectures from several specialists in the field, urban planning, industry, the services and mobility, was very well received and drew in 11,138 visitors.

	Visitors			
	2016	2017	2018	2019
January	0	935	1,289	1,365
February	0	1,350	1,284	1,786
March	0	1,932	1,657	1,196
April	0	1,235	2,357	1,210
May	0	3,448	3,191	3,101
June	0	817	1,311	591
July	0	1,676	1,134	777
August	0	509	749	536
September	0	1,028	1,752	1,354
October	0	2,182	1,697	1,880
November	1,143	1,825	1,703	1,299
December	833	1,057	1,016	929
	1,976	17,994	19,140	16,024

The exhibition ‘Els bombers i les bombes de vapor. 1826-1920’ [Fire fighters and steam fire engines.1826-1920], given the lack of proposals for a new temporary exhibition, was extended and once again received good visitor indicators. The incorporation of a small space in the exhibition entitled ‘Memòries incandescentes’ was not so well received.

	‘Els Bombers i les bombes de vapor. 1826-1920’ [Fire fighters and steam fire engines. 1826-1920]	‘Memòries incandescentes’
January	790	
February	786	
March	225	
April	742	
May	2,740	
June	373	
July	628	
August	536	
September	1,244	
October	1,156	117
November	1,299	
December	619	
	11,138	

The other side to the Espai is that use of its spaces is provided for day events, conferences, training initiatives and diverse activities promoted by Sants-Montjuïc district, by the Barcelona Social Emergencies Centre (CUESB), and by the Guàrdia Urbana and Bombers themselves for carrying out their internal promotion processes.

	Provision of space			
	2018		2019	
	Users	Sessions	Users	Sessions
January	55	5	262	15
February	73	6	392	26
March	251	13	562	21
April	593	21	285	16
May	293	12	226	21
June	274	19	217	29
July	69	4	149	8
August	0	0	0	1
September	20	3	13	3
October	256	14	471	30
November	423	19	289	19
December	199	9	177	12
	2,506	125	3,043	201

Awareness of the building’s potential led to a significant increase not just in number of users but even more in number of training sessions held there in 2019.

To be the city’s benchmark in fire prevention and self-protection, the Espai Bombers planned to expand its operational programme and open up its facilities to city residents, the university world’s sectors most closely linked to fire prevention, professional associations, business groups and professionals linked to fire prevention.

The Fire Prevention, Extinction and Rescues Service (SPEIS) is part of the Espai Bombers. Part of the organisation has to be integrated into the Espai and thereby formalise the fact it belonged to the Barcelona Fire Brigade.

Future challenges have to focus on boosting all the activities that enable the Espai Bombers’ identification as a knowledge hub staffed by professionals and experts, with the aim of leading projects beyond the municipal level and requiring leadership from the Barcelona Fire Brigade’s technical staff in projects associated with the realm of emergencies and fire prevention and self-protection.

A decisive commitment has to be made from the Espai Bombers to expand the interpretative range of current fire-protection regulations by introducing aspects of CFD drills that enable them to go beyond the mandatory regulatory framework in one-off projects.

2.2.4. Prevention campaigns

‘Don’t invite a fire into your home’ campaign

See Section 1.2.

Day event on Fire Safety in Hospitals and Residences

See Section 1.2.

3 Planning

The Planning Division is divided up into two units and an area aimed at supporting the service's internal organisation: the Technical Support Unit, the Procedures Unit and the Training Area.

The Technical Support Unit is involved in defining the technical conditions and monitoring the acquisition of materials and intervention equipment: vehicles, protective equipment, tools, etc. It evaluates their risks and plans their incorporation as part of a continuous improvement process in maintenance. It also ensures proper, safe, sustainable and responsible use.

The Procedures Unit drafts the protocols adapted to the city's risk scenarios, taking into account the incorporation of new equipment and technologies and by coordinating deployment through training and acquisition of the necessary materials.

The Training Area identifies and proposes training priorities, ensures knowledge is recycled and incorporates new training initiatives according to technological and organisational requirements or the need for incorporating new equipment, vehicles and materials.

The investment of the three units is structured according to the guidelines of the SPEIS Master Plan initially approved in 2014, and training initiatives have been planned in line with the Training Action Plan for 2016-2020.

A new development, it should be noted, was that last July saw a staggered replacement of 080 logos with 112 in fire brigade vehicles and on fire station gates. The change did not represent any difference in how emergency calls were received; all city residents could then continue calling both the 080 and the 112 numbers.

An opportunity was taken from the occasion to standardise the visual image of all vehicles.

3.1. Technical Support Unit

Important investment projects continued to be made in 2019 for the smooth running of the Service, and services and minor procurements went out steadily to public invitations to tender.

3.1.1. Maintenance contracts

As regards the more important maintenance contracts, the following initiatives were carried out:

- Preparation of the invitation to tender and contract award for the preventive and corrective maintenance of hydraulic tools.
- Preparation of the invitation to tender and contract award for the supply of foaming agents.
- Preparation of the invitation to tender and contract award for the preventive and corrective maintenance of cutting and ventilation tools.
- Continuation of the large maintenance contracts for personal protective equipment (PPE) and collective equipment:
 - Cleaning, inspection and maintenance of personal protective clothing and equipment.
 - Recharging and inspection of air cylinders.

- Monitoring of operational contracts concerning:
 - Hardware.
 - Prevent maintenance of self-contained breathing equipment.
 - Recharging and inspection of extinguishers.
 - Supply and inspection of medical oxygen and acetylene gas cylinders.

3.1.2. Investment in vehicles

As for vehicle-investment projects (Chapter VI), note the following:

- Holding an invitation to tender and contract award for the provision of a vehicle as a Fire Brigade command centre and another as a logistics centre.
- Constructive monitoring of the invitation to tender for the supply of 6 BUL and 2 BUP.
- Reuse of a 4x4 logistics vehicle from a vehicle that had finished its depreciation period with the Guàrdia Urbana [city police].
- Drafting the technical specifications for the acquisition under an agreement with the Barcelona Port Authority (APB) over a technical rescue vehicle and a boat.
- Receipt of a B410 fire engine for large fires acquired under an agreement with the APB.

3.1.3. Investment in equipment and materials

This year saw a continuation with the previous dynamics gradually moving over as much as possible from acquisitions made from small-scale, non-tendered procurements to public invitations to tender.

As for materials, note the following acquisitions:

- Holding invitations to tender and contract awards for the supply of hoses.
- Portable large-capacity monitor.
- Various pieces of equipment for the diver group.
- Acquisition of a rescue mattress.
- Acquisition of portable generators for the station's storage rooms.
- Acquisition of two pneumatic lift cushions.

As for personal protection equipment (PPE), an important step was taken this year to regularise the acquisition of the entire gear and PPEs:

- Holding of invitation to tender and contract award for supply the SPEIS's gear, divided into fourteen lots. Four lots were finally declared void.
- Holding of an invitation to tender and contract award for supplying fire-protection jackets and overtrousers for the next four years.
- Acquisition of diving gear through small-scale, non-tendered procurements before the invitation to tender.

3.2. Procedures Unit

The Procedures Unit drafts the protocols adapted to the city's risk scenarios, taking into account the incorporation of new equipment and technologies and by coordinating deployment through training and acquisition of the necessary materials.

New procedures continued to be drafted and already existing ones revised and amended.

These revisions are conditioned by the operational needs of response personnel, training needs that require the creation of new training materials that are compatible with the operational work systems, changes in equipment and response vehicles, and other technological innovations that require the ongoing revision of work methods.

In line with previous years, the unit has three strategic goals in terms of procedures:

- New procedures in multimedia flash and summary tab formats.
- Multimedia procedures approved in previous years and the incorporation of explanatory videos into the document database.

- Introducing manoeuvre formats into procedures for operational prevention practices carried out at fire stations.

As a significant new development and a result of the work carried out since the previous year, the Procedures Unit this year merged with the Training Department, substantially amending the criteria established in the previous year in ISO 9001 certification.

A new technical shift leader was appointed in 2019, strengthening the Unit after the departure of another in the Training Department the previous year.

3.2.1. Procedures approved in 2019

PROCOP 1.05 'Interventions in house fires'

Procedure that came into force on 4 November 2019, as published in Service Order 47/19.

The aim of the procedure is to offer organisational and task-distribution guidelines in interventions in house fires, to provide a standard response with the resources established in the SPEIS's 'Barcelona Model'. The procedure's approval brought an end to the 'Residential Smoke' service, which came to be regarded as 'Residential Fire', with an initial allocation of 'full call-out' resources, as described in the procedure. This procedure regularised the work standard of the 'Barcelona Model' call-out for this type of services.

It also provides information guidelines for people affected in buildings where a fire has occurred.

PROCOP 2.05 'Medical interventions in stations'

Procedure that came into force on 24 June 2019, as published in Service Order 25/19.

It defines the use of dispensers located in the various fire stations in relation to citizen demand for services, where it is possible to receive notices directly in the station and by providing health care at the same station or in its vicinity.

It establishes the systematic approach and work circuit in possible transfers arising from health interventions and ultimately determines the way in which these interventions are compiled in the emergency management applications.

'Systematic approach to possible presence of asbestos in metro carriages'

Systematic approach communicated on 24 June 2019 in Service Order 25/19.

Its aim is to facilitate the detection and identification of metro carriages with asbestos and provide the guidelines for the types of work that require specific safety measures.

3.2.2. New procedures on the way

Framework manoeuvres document

Procedure relating all the manoeuvres included in the Fire Fighters portfolio of operational services to operational station procedures and practices. It gives a new order to operational procedures and develops them in lower areas which can be regulated and amended without necessarily having to change the procedures.

The work incorporates the Framework document for preparing manoeuvres, similar to the framework document for preparing procedures, which it adds a few variations to.

Procedure for preparing and monitoring SPEIS documents

Work that is aimed at establishing the types of SPEIS documents that are important for the running of the activities. It determines the previous documents' drafting and monitoring process. Pending approval.

Project for optimising the starts of shifts

Work that is aimed at optimising and unifying the information and procedures required for starting a shift with as much information as possible within optimal time periods. Pending approval.

Fires in underground car parks

Procedure with document at amendment stage for adaptation to procedure 1.05. Approval of the residential fire procedure determines the adaptation of its rough draft, with the incorporation of the same actions and the same order of call-out vehicles.

Location of vehicles during interventions (General Operations Area)

Document amended on the basis of procedure 1.05's approval. Pending the change made to the Multi-Force Work Group created by the General Operations Area (AGO). The group's aim is to regulate and arrange the occupation of public highways with vehicles from the various forces, irrespective of their order of arrival at the service's location. The goal is for each force to adopt the procedure.

Feedback

Drawn-up procedure that a verification test has been carried out with, for post-intervention feedback. It establishes three levels of feedback, pending the incorporation of the circuit to provide and ensure counselling for those taking part in interventions, if necessary.

Confined spaces

Procedure that determines the risks and specific safety guidelines for these types of spaces. Pending the completion of the risks board before continuing with its processing.

Fires at sports and recreational ports

Procedure that has started meetings with the work group and already established the guidelines and system that it has to have, as well as the manoeuvres that are associated with it.

Gas leaks

An initial document has been drafted which includes the procedure's structure. Pending reactivation of the work group.

3.2.3. Procedures under review

Procedure for interventions in high-rise buildings

The format and type of call-out is being adapted to the provisions included in PROCOP 1.05.

Service communication

The board is being amended to include the changes resulting from amendments to existing procedures and the creation of new procedures.

In addition to the above, work is also being carried out on other procedures, which are currently at different stages of development:

- Multiple-victim accidents.

- Water and foam installations.
- Interventions in aquatic environments.
- Interventions with biological hazards.
- Interventions with radiation hazards.
- Interventions outside municipal boundaries.
- Interventions in collapsed structures.

3.3. Training Area

The Barcelona Fire Brigade's Training Plan's development followed the provisions set out in the 2016-2020 Training Plan. The plan states that annual training actions are to be determined on the basis of several processes: an analysis of accident rates, specific needs of each station, needs of specific intervention groups (divers, healthcare workers, Emergencies Management Centre (CGE), technical staff and senior officers). The new materials and procedures that are incorporated and determined by the brigade will also end up shaping the training initiatives to be carried out during the year.

As for global data relating to training, the following activities were carried out in 2019:

3.3.1. Training actions

Forty-one training initiatives, with a total of 204 courses, which involved 2,461 hours of training and 2,362 participants. The total impact of all the training activities on those attending came to 27,011 hours of training for SPEIS staff.

Training at SPEIS covered the various subject areas as follows:

AREAS	TOTAL ANNUAL No. INITIATIVES	TOTAL MEN ATTENDING	TOTAL WOMEN ATTENDING	TOTAL ANNUAL No. EDITIONS	TOTAL HOURS
OTHER	5	40	6	9	72
SENIOR OFFICERS	6	460	16	54	237
CONSTRUCTION	2	60	2	2	46
EXTINCTION	2	402	11	7	18
FOREST FIRES	5	60	4	38	560
FACILITIES	3	478	12	27	474
HEIGHT RESCUE	5	468	13	34	575
CHEMICAL HAZARD	2	18	0	2	78
HEALTH CARE	4	41	13	8	168
DIVERS	4	68	2	7	178
VEHICLES/DRIVING	3	185	3	16	55
TOTAL:	41	2,280	82	204	2,461

3.3.1.1. Ongoing training (compulsory)

Advanced course in height rescue

This course was aimed at discovering and learning how to apply advanced techniques in height rescue operations, using specific tools and techniques and applying command, emergency-coordination and victim-assistance principles. This training initiative was held at the Llevant station, so the training could be carried out at its practice tower.

Gas-, electricity- and lift-installation course

This training activity was aimed at learning the skills for properly handling gas, electricity and lift facilities. Application of certain intervention procedures. Use of specific materials for the proper implementation of the actions. For the purposes of carrying out this training initiative, trainers from SPEIS's facilities area added service connections, counters and gas-, water- and electricity-facility protection systems to the Zona Franca 'Dark Fire' models pipes, to simulate these facilities and enable the practical part of this training. The practical lift-training part was also made possible at the Espai Bombers lift on Carrer de Lleida.

3.3.1.2. Training at fire stations (when on call)

These are training initiatives carried out at fire stations, for teaching expertise in new vehicles, tools, techniques and procedures. Notable aspects include training in house-fire procedures and relating to the introduction of new tablets, as part of the Service's modernisation. Also noteworthy is the training in the new heavy fire engine, for staff at the Montjuïc and Zona Franca stations.

3.3.1.3. Voluntary training

These are training initiatives offered to operational fire fighter staff. This year saw two technical-English module courses, as part of the EBPCC's intermediate-level training course. A fire rescue and extinction course was also given on board sea vessels in Seganosa.

Medical services

SPEIS's medical staff took specific courses in their area of work: Advanced course in electrocardiography, course in compromised air-passage treatment, and agitated-patient healthcare assistance course.

Divers

Divers, as a group of SPEIS's operational staff with a specific field of activity, performed the following training initiatives:

- A course for handling rescue craft, with the Red Cross - Getaria.
- A basic confined-space rescue course.
- As part of the mandatory two-yearly renewal of professional cards, a basic life support – DAN oxygen-supply course was given.

3.3.2. Financial resources

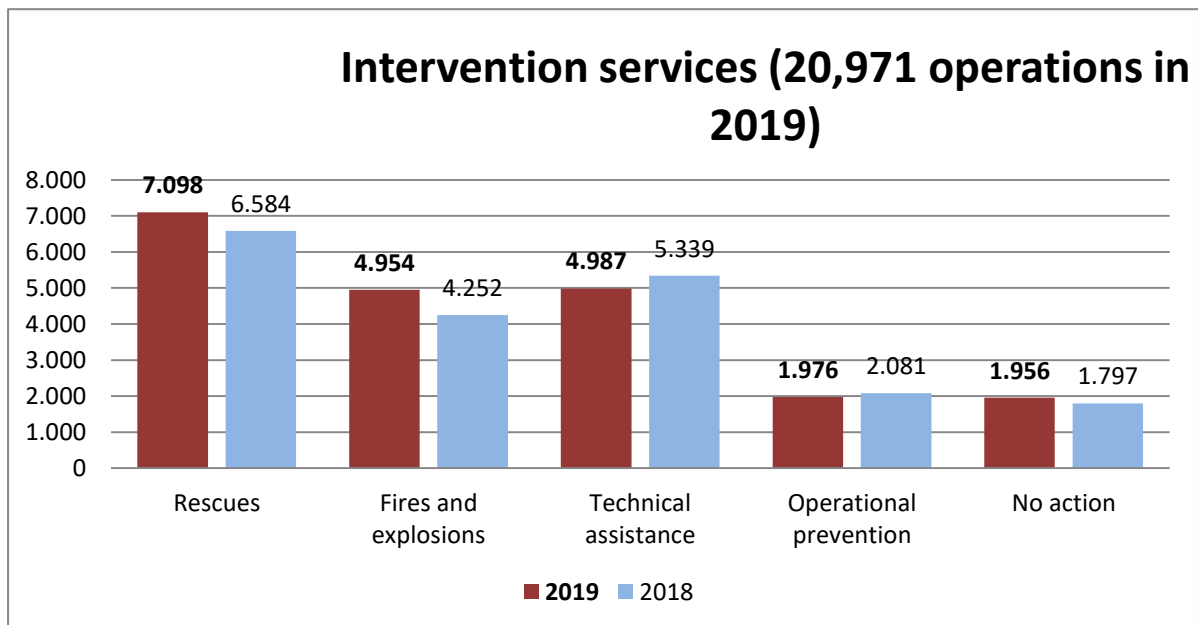
The financial resources for implementing the SPEIS training plan were as follows:

AREAS	TOTAL ANNUAL No. INITIATIVES	TOTAL MEN	TOTAL WOMEN	TOTAL ATTENDEES	TOTAL ANNUAL No. EDITIONS	HOURS EDUCATION AND TRAINING /EDITION	TOTAL AMOUNT	FUNDING SOURCES	
								Manager's Office for Safety and Prevention	APB
OTHER	5	40	6	46	9	3	6,199.04	6,199.04	
SENIOR OFFICERS	6	460	16	476	54	4	45,568.35	6,840.00	38,728.35
CONSTRUCTION	2	60	2	62	2	6	300.00	300.00	
EXTINCTION	2	402	11	413	7	6	2,202.00	2,202.00	
FOREST FIRES	5	60	4	64	38	70	16,238.18	16,238.18	
FACILITIES	3	478	12	490	27	6	49,824.00	49,824.00	
HEIGHT RESCUE	5	468	13	481	34	5	79,296.48	79,296.48	
CHEMICAL HAZARD	2	18	0	18	2	38	14,211.00	0.00	14,211.00
HEALTH CARE	4	41	13	54	8	12	3,670.88	3,670.88	
DIVERS	4	68	2	70	7	24	58,719.84	8,478.00	50,241.84
VEHICLES/DRIVING	3	185	3	188	16	15	880.80	880.80	
TOTAL:	41	2,280	82	2,362	204	189	277,110.57	173,929.38	103,181.19

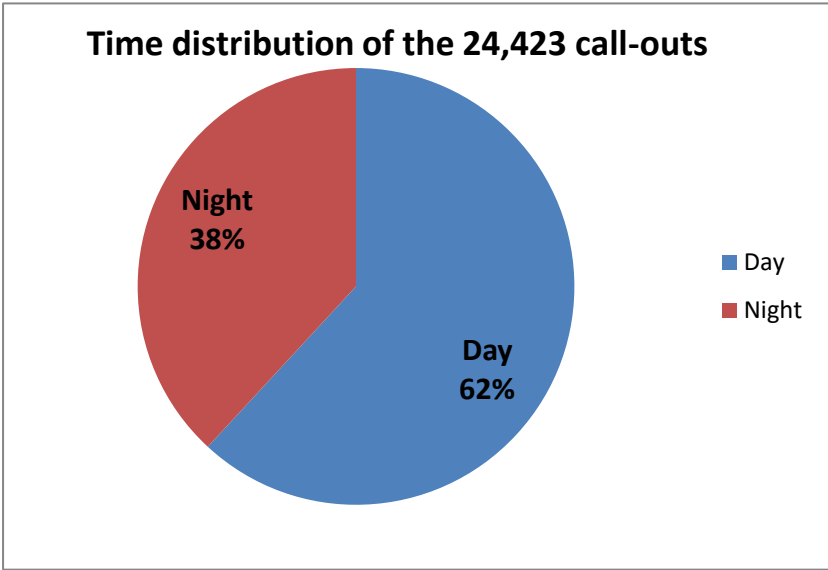
4 Responses

The Barcelona Fire Brigade carried out a total of 20,971 interventions in 2019. This figure represents an increase of 918 services compared to the 20,053 performed in 2018, a 4.58% increase.

The response service figures were as follows:

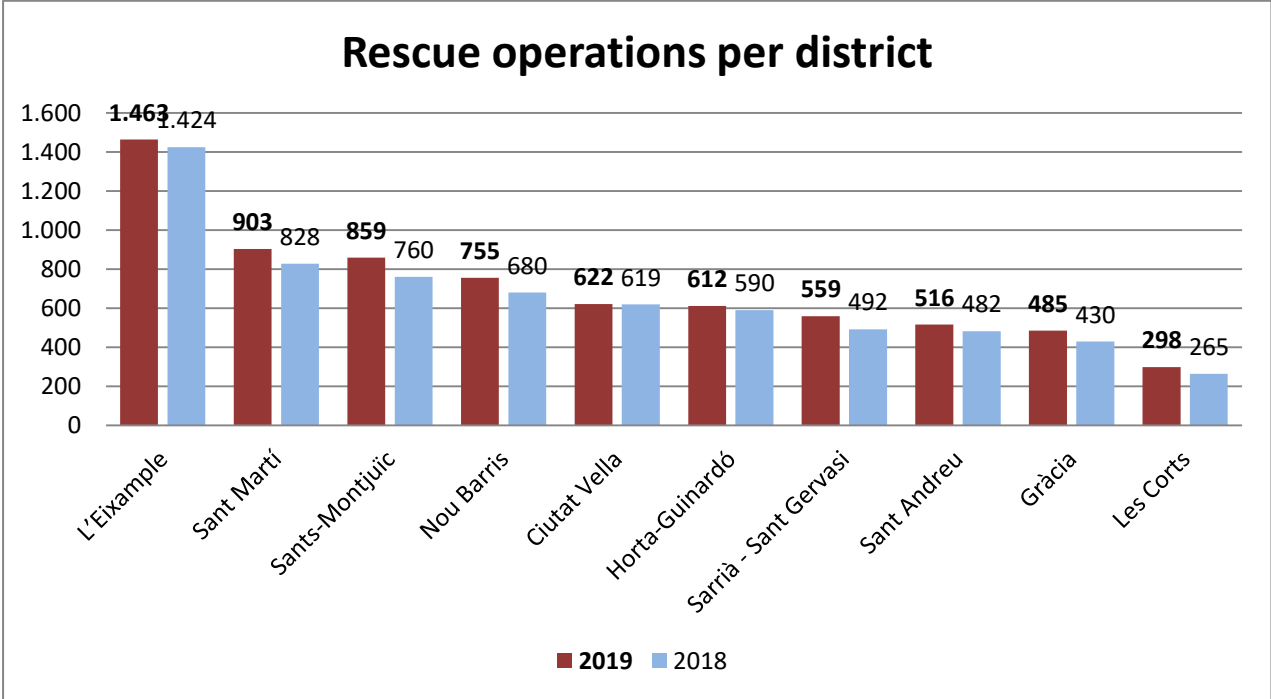


	Day		Night		TOTAL 2019		TOTAL 2018	
Eixample	3,789	25.07%	2,579	27.70%	6,368	26.07%	6,208	26.81%
Llevant	2,740	18.13%	1,956	21.01%	4,696	19.23%	4,294	18.55%
Montjuïc	2,954	19.55%	1,573	16.89%	4,527	18.54%	4,216	18.21%
Sant Andreu	2,709	17.93%	1,703	18.29%	4,412	18.06%	4,242	18.32%
Vall d'Hebron	2,028	13.42%	1,184	12.72%	3,212	13.15%	3,079	13.30%
Zona Franca	622	4.11%	305	3.27%	927	3.80%	848	3.66%
Vallvidrera	270	1.79%	11	0.12%	281	1.15%	267	1.15%
	15,112		9,311		24,423		23,154	



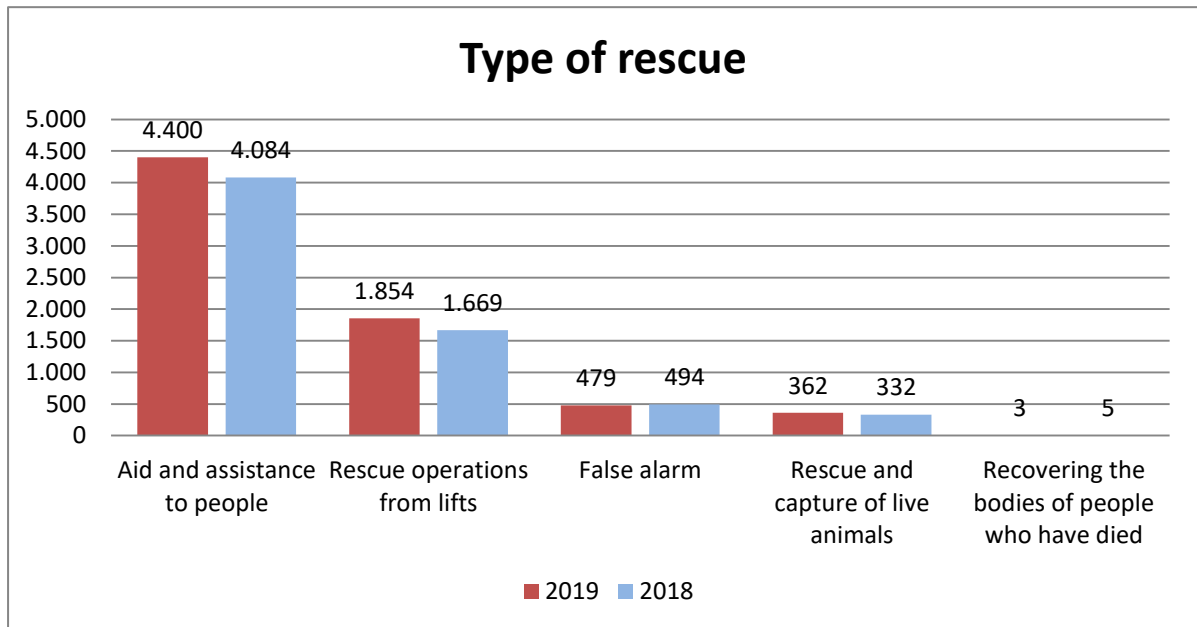
4.1. Rescues

There were 7,072 rescue operations in 2019 (not including 26 outside the municipal boundaries); in other words, 514 more interventions than in the previous year, which represents 33.85% of the total number of operations. There were 6,584 rescue operations in 2018, representing 32.83% of the total.



Out of the total number of rescues, 365 were non-emergencies.

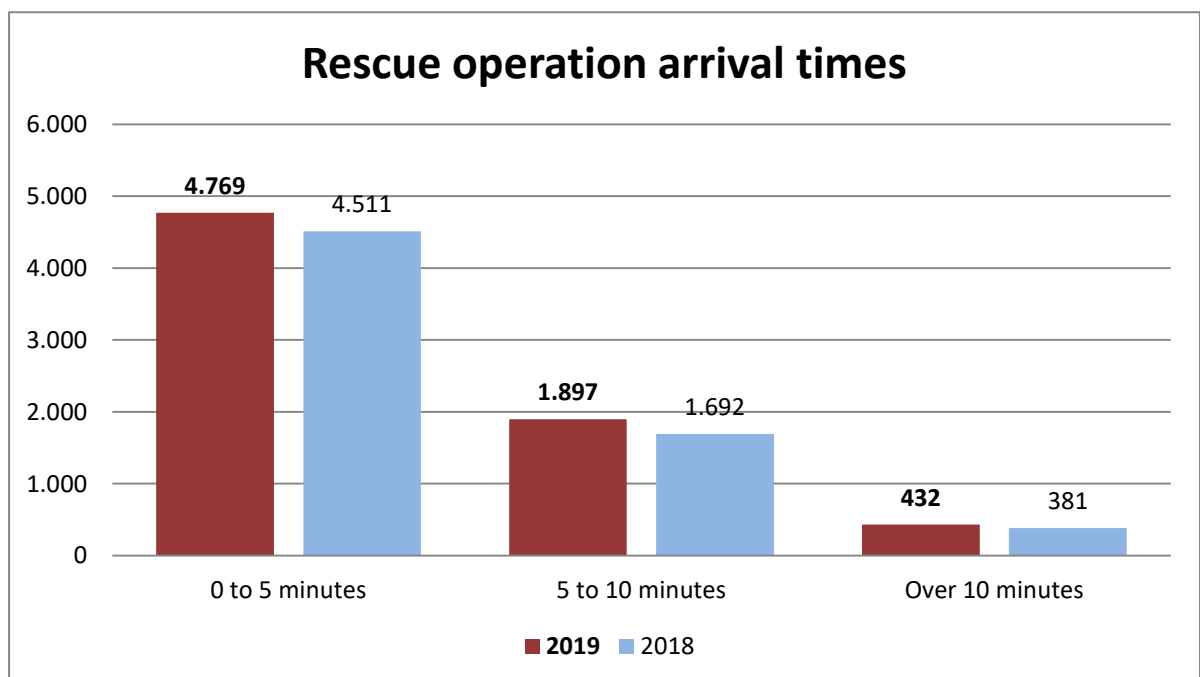
61.99% of the total were to attend to or assist individuals (4,400 responses). 26.12% were to rescue people in lifts (1,854 responses). As for the other rescue operations, 479 were false alarms, 362 were rescues or captures of live animals and 3 recoveries of dead people.



Medical assistance was given in 3,450 occasions and the Fire Brigade’s medical teams took 517 people to hospital. Medical Emergency System (SEM) staff took all the other cases.

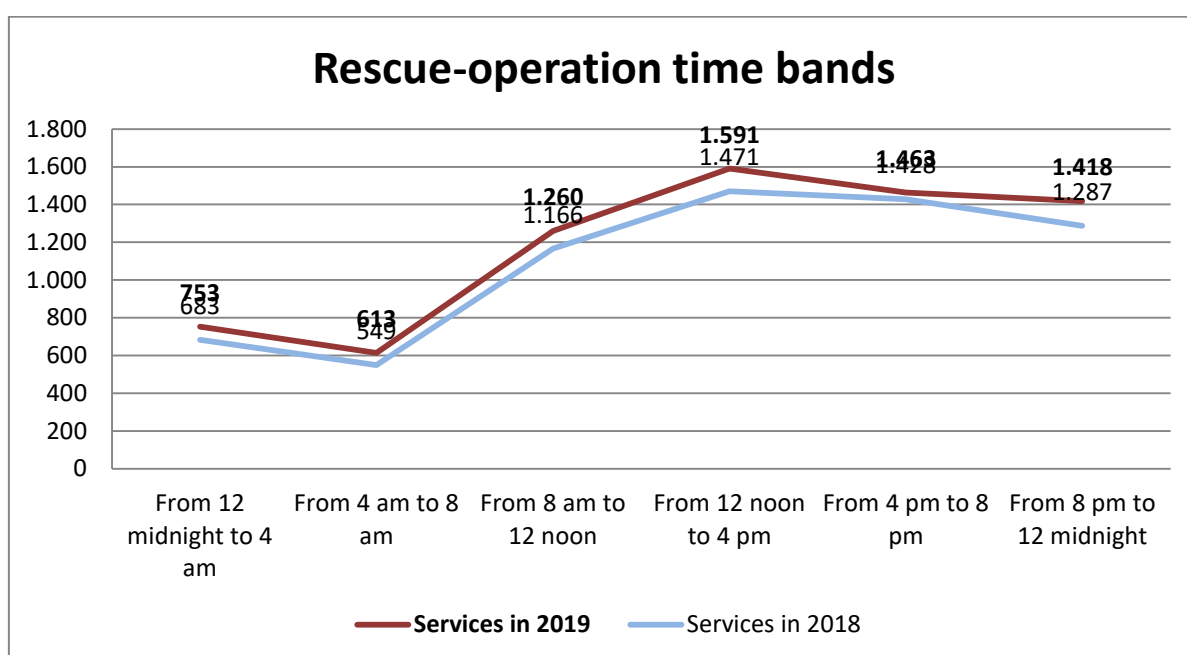
As regards the weekly spread of rescue operations, Thursdays are the least busy day (13.75%) while Saturdays are the busiest (15.33%). In fact, weekend rescues (Fridays to Sundays) continue to increase compared to the rest of the week.

Emergency service arrival times were as follows:



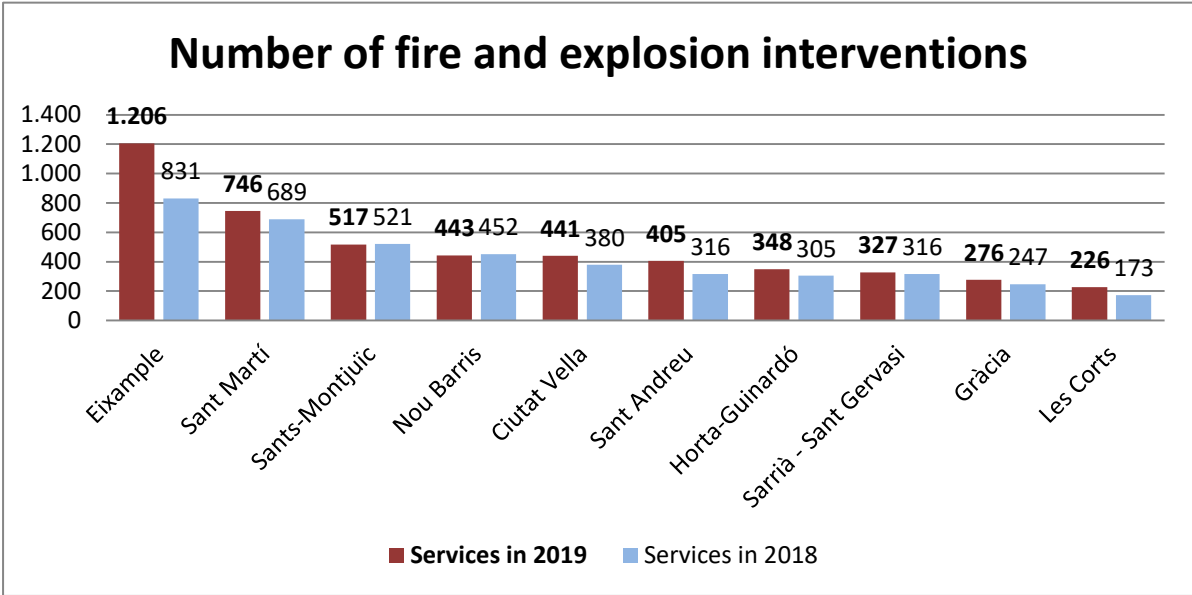
The figures show that the charter’s pledged target of service arrivals in under 10 minutes for 90% of emergencies was exceeded by almost 4 percentage points, as the actual figure was 93.92%. (In 2018, it was 94.21%.) Services arrived in under 5 minutes in 67.19% of rescue operations within Barcelona’s municipal boundaries (68.51% in 2018).

Day-time rescue operations accounted for 60.78% of the total, while 39.22% were carried out at night, compared to 61.74% and 38.26%, respectively, in 2018.

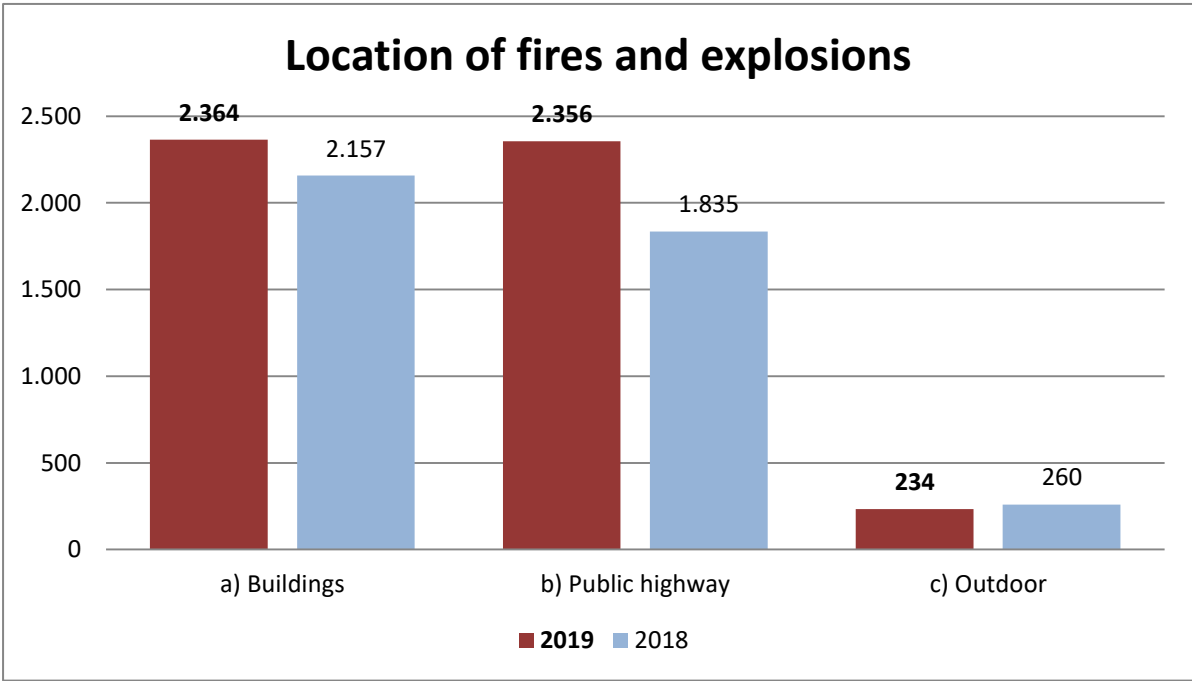


4.2. Extinguishing fires and explosions

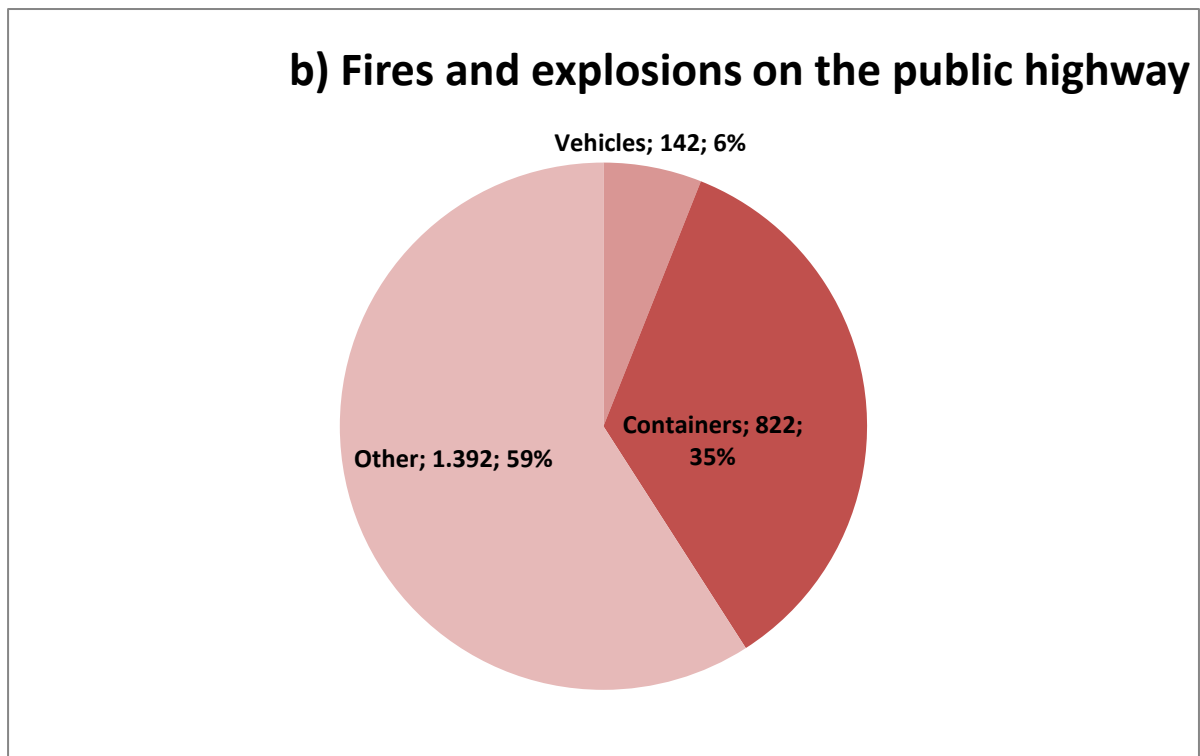
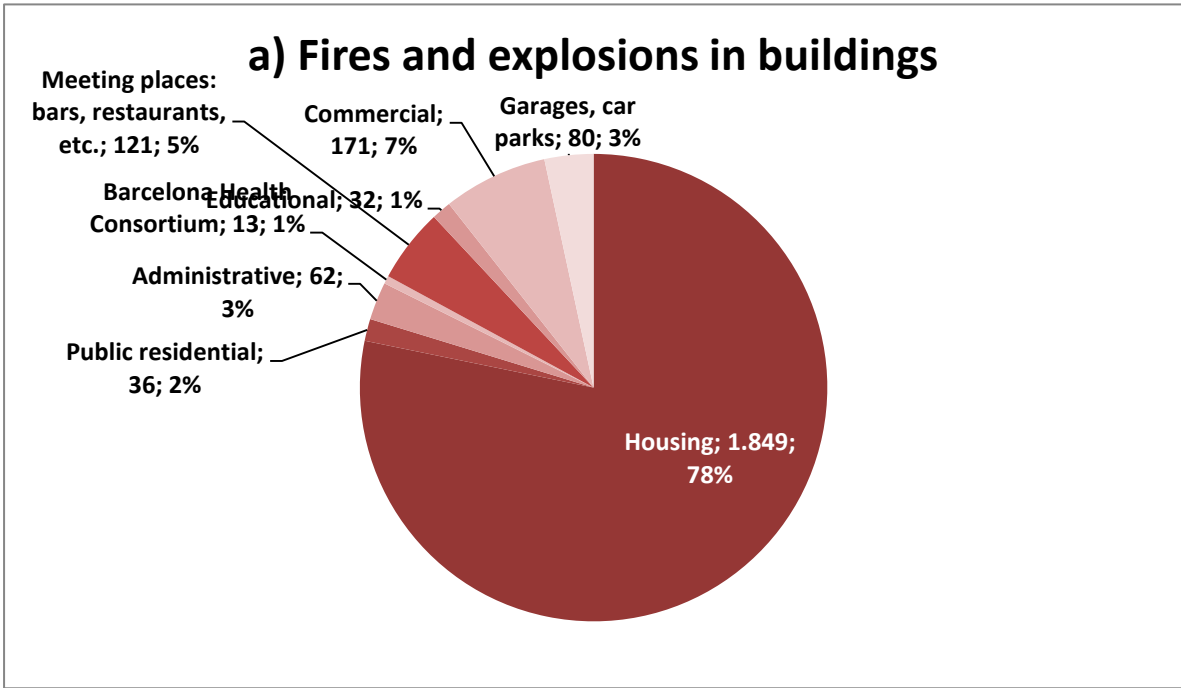
There were 4,954 responses to fires and explosions in 2019, a figure corresponding to 23.62% of all services. In absolute terms, there were 702 more services of this type in 2019 than in the previous year. Excluding the 19 services performed outside municipal boundaries, the responses were distributed as follows:



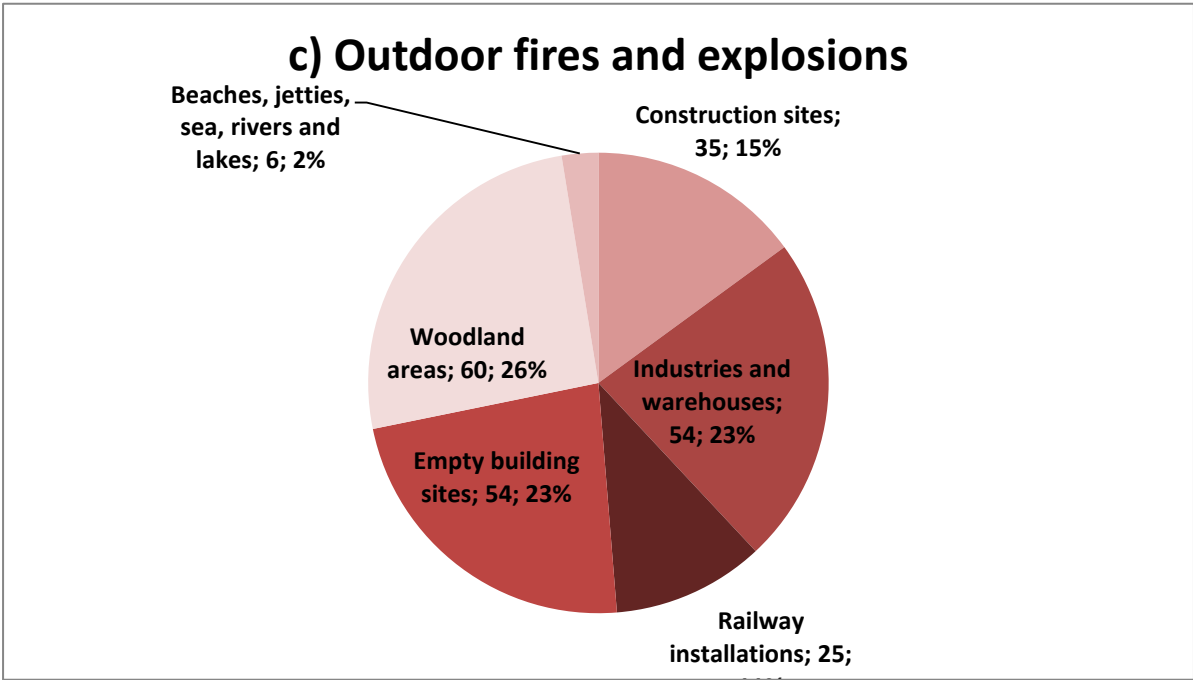
Of these, there was an increase in the number of fires in buildings and on public highways. 19 of these responses were located outside municipal boundaries.



Out of a total of 4,954 fire responses, 2,356 were public highways, a higher figure than the 1,835 recorded in 2018. In addition, responses included putting out 2,364 fires in buildings (1,849 of which started in homes), representing 37.32% of fire-related interventions.



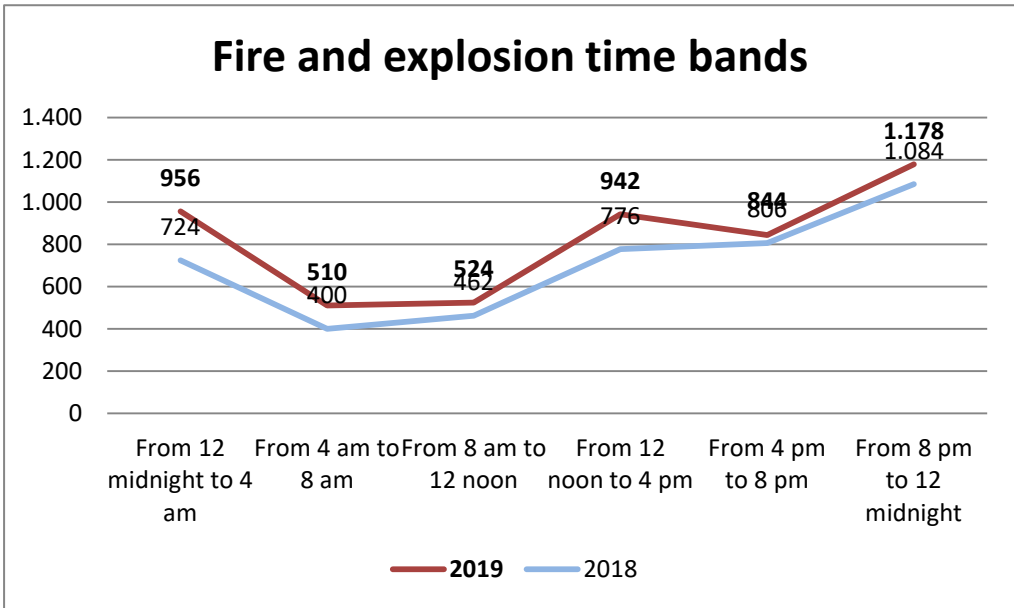
Interventions were required for 60 forest fires, compared to 49 in 2018. The 22.4% increase was the result of less favourable weather conditions. This type of intervention represented 1.21% of fire-fighting operations.



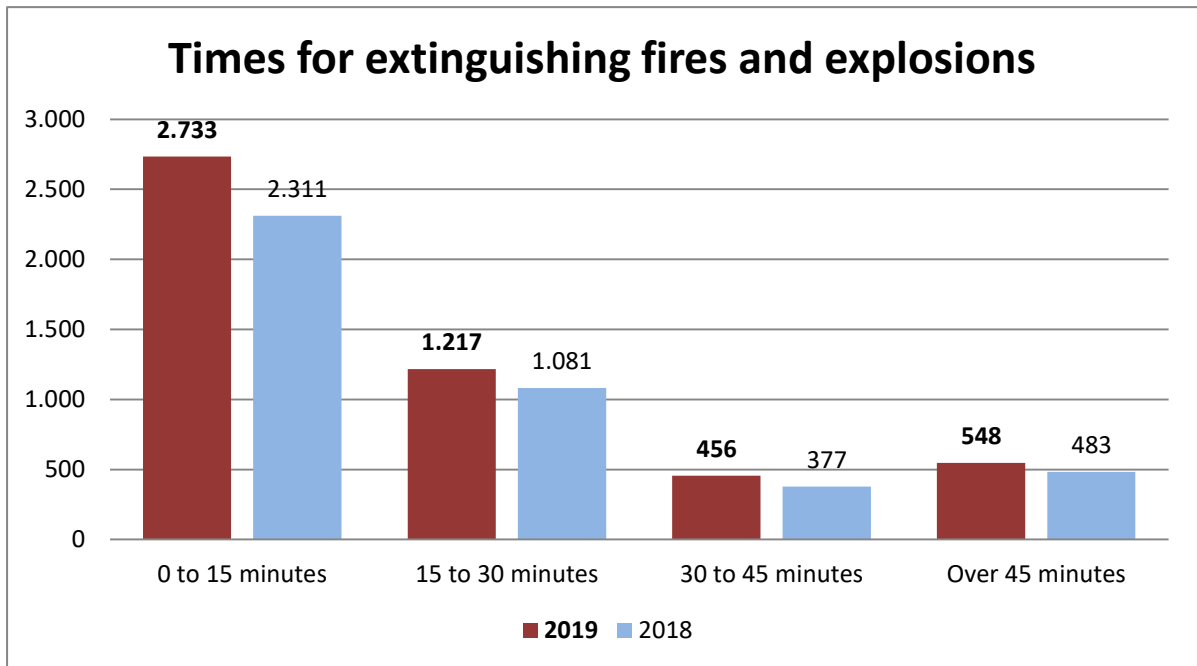
As regards days of the week, Mondays were the quietest (with 12.70%) and Saturdays the busiest (with 15.91%).

And 46.63% of fire-related services were performed during the day while 53.37% were carried out at night (between 8 pm and 8 am).

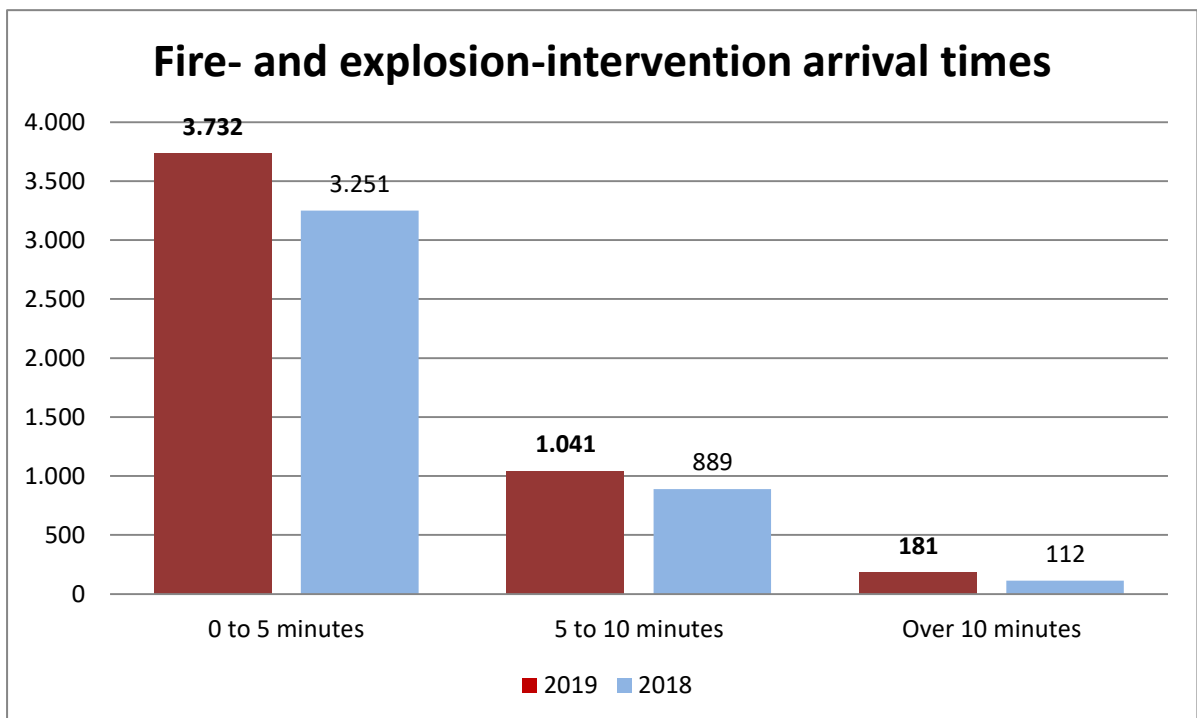
Fire operations in Barcelona exceeded the Service Charter's pledged target (to arrive in under 10 minutes in 90% of emergency cases) by 6 percentage points, as the actual figure was 96.34%. (In 2018, it was 97.37%.) In 75.33% of emergency fire call-outs within the Barcelona municipal area, the response time was under 5 minutes (76.46% in 2018).



The average response time for emergencies (fires/explosions and emergency rescues) was 4 minutes and 3 seconds (compared to 4 minutes and 2 seconds in 2018).



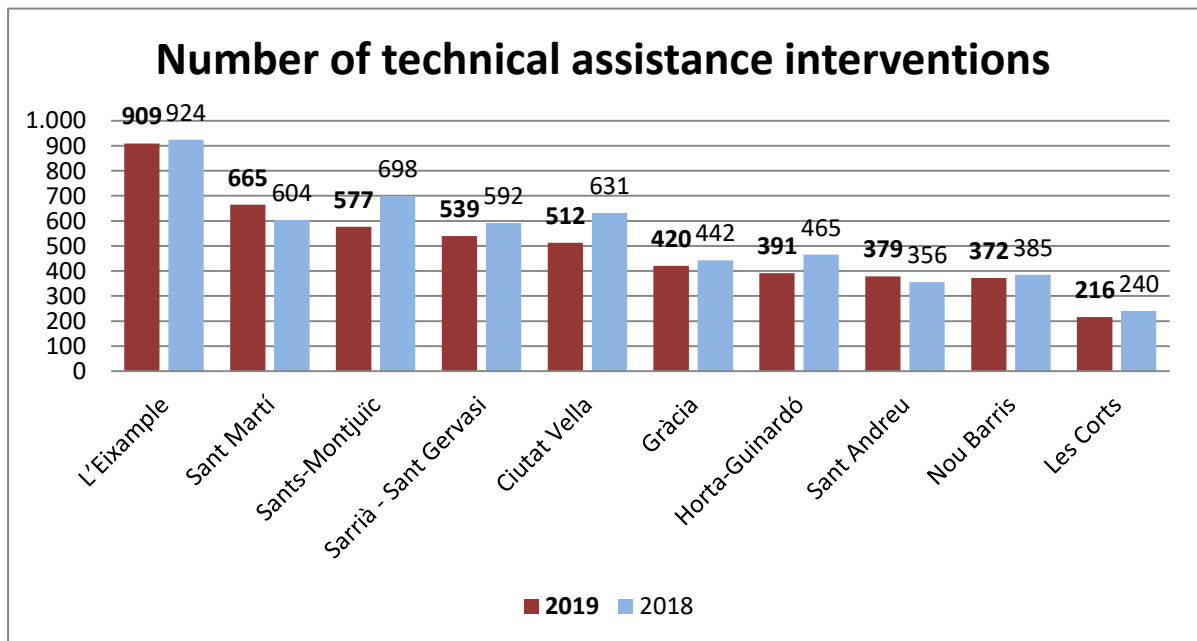
Finally, the extinction times were distributed as follows:



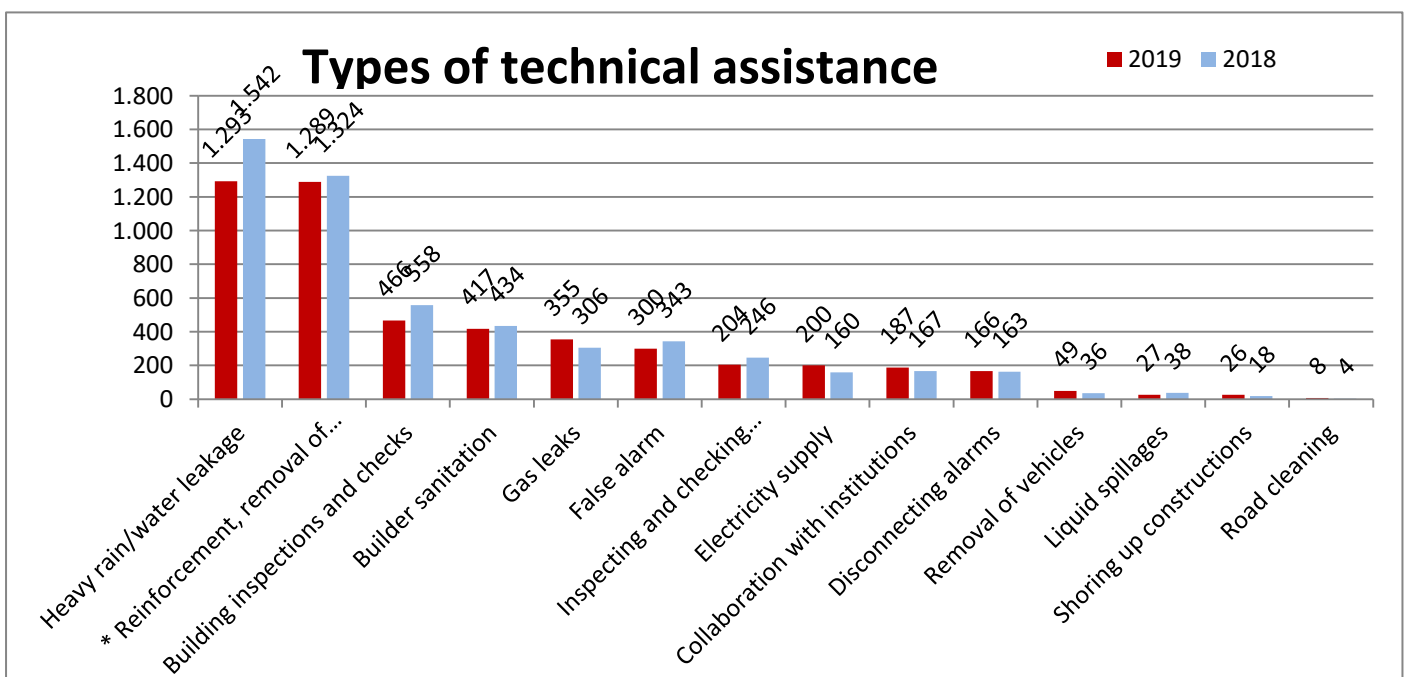
4.3. Technical assistance

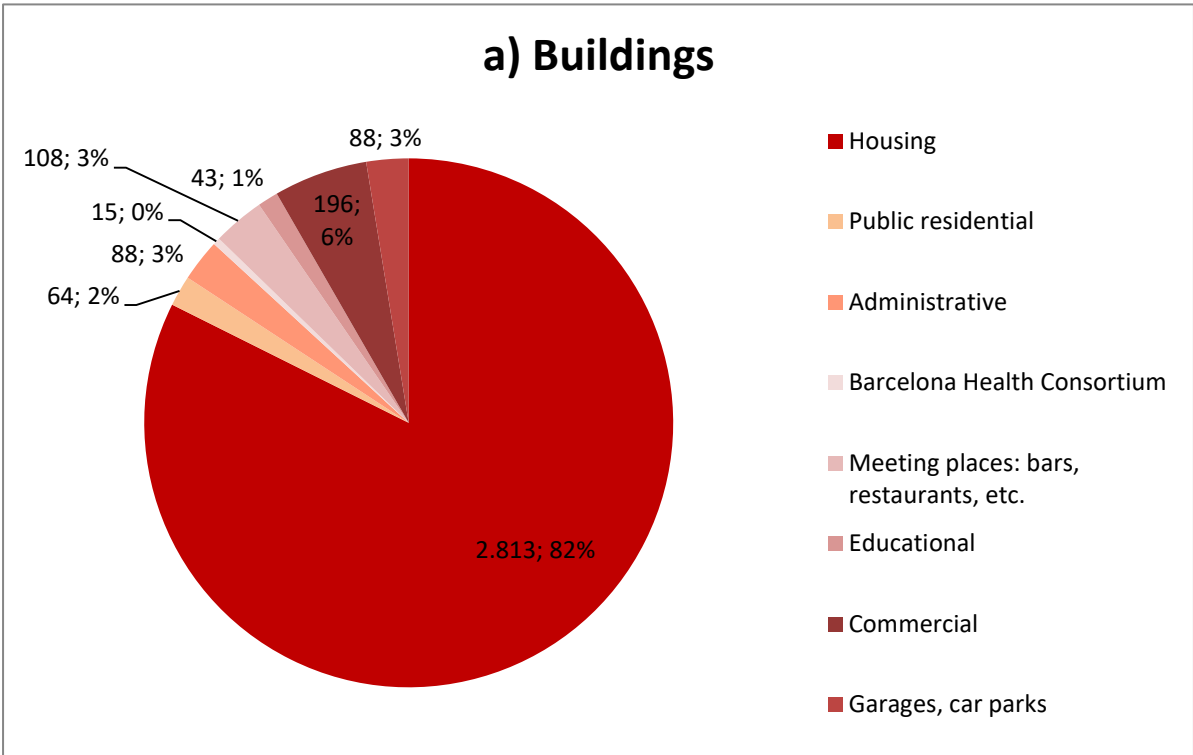
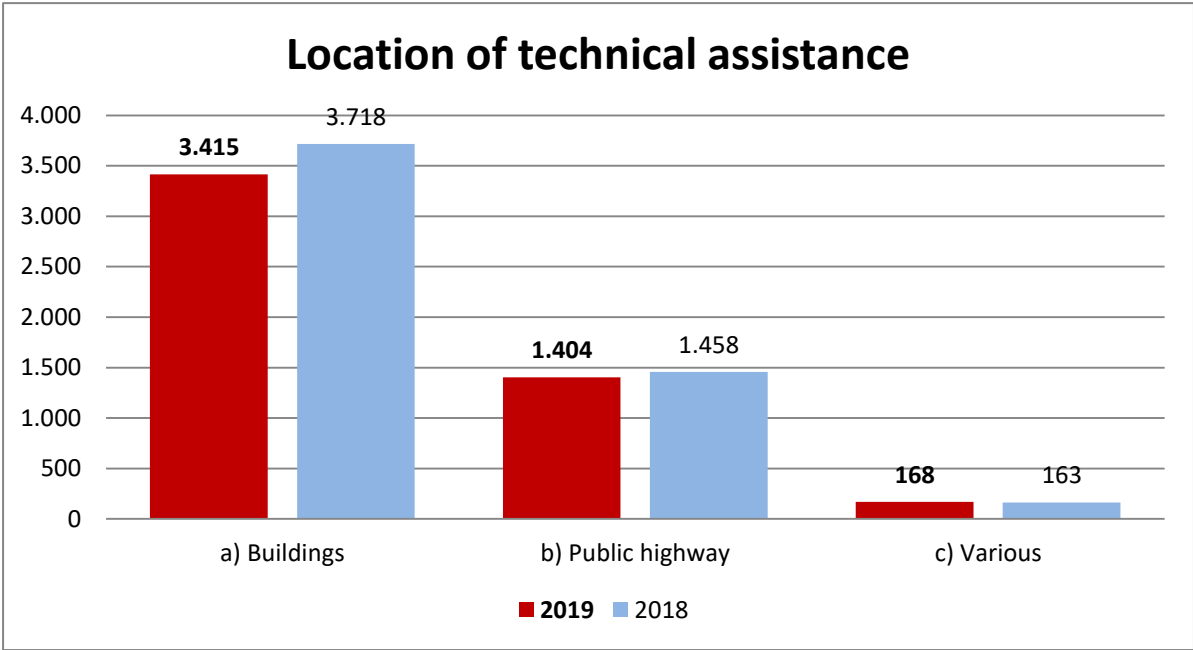
Fire fighters perform a large number of highly varied services; these are ‘non-emergency’ help services for the public which are classed as technical assistance.

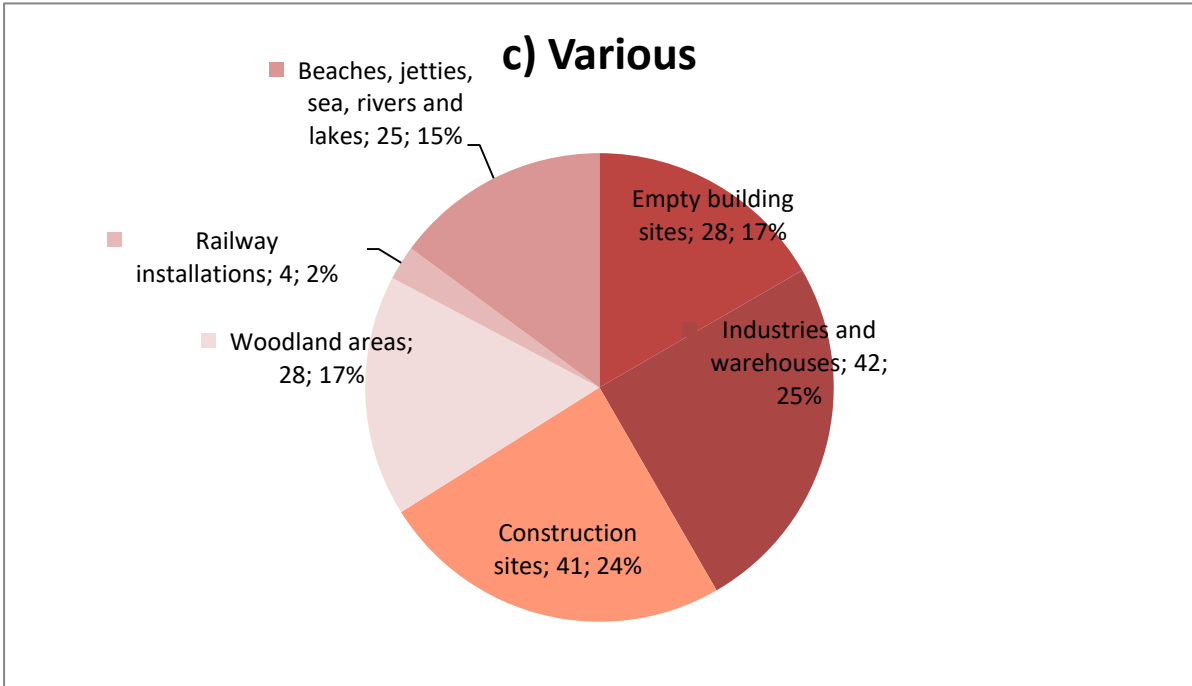
A total of 4,987 operational technical assistance services were performed in 2019 (compared to 5,339 in 2018), representing 23.78% of all responses. Excluding the seven services performed outside the municipal boundaries, the district breakdown of responses was as follows:



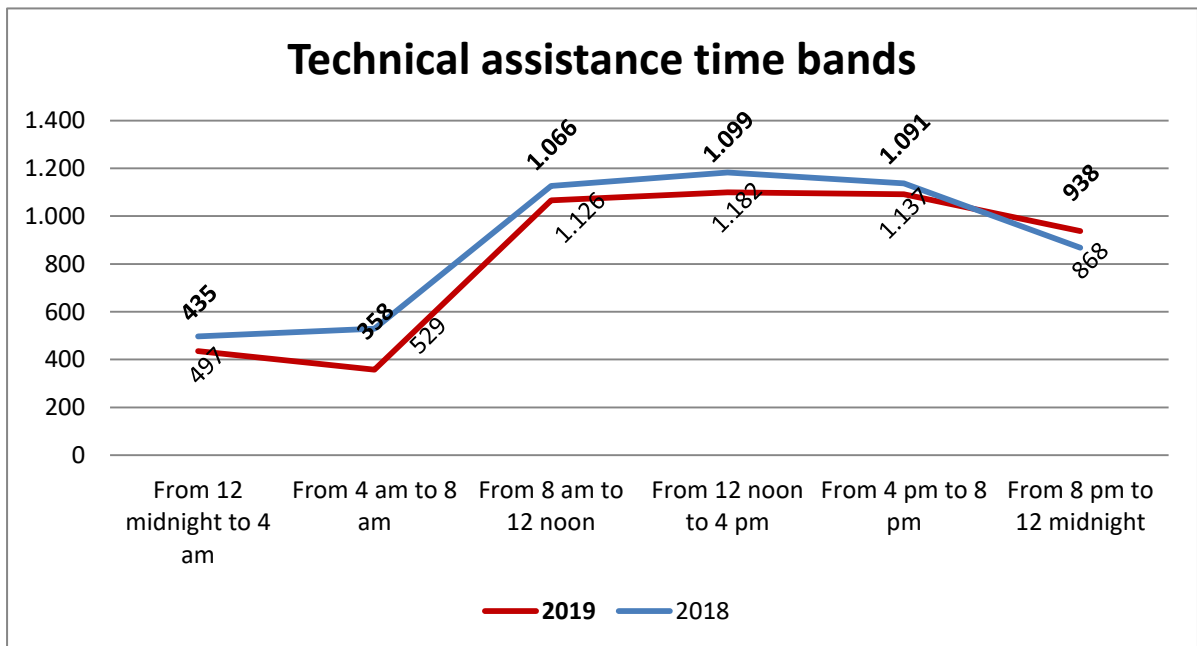
The type of technical assistance carried out was varied:







65.29% of the technical assistance operations occurred during the day and 34.71% at night.



Lastly, we should mention the 183 school visits made (150 in 2018) and two open days held as part of the Esquerra de l'Eixample's Festa Major or big annual festival (held twice in 2018). There were also 55 visits to the Eixample, Llevant and Montjuic fire stations, with a total of nearly 3,200 visitors.

4.4. Operational prevention

Under the generic name of 'operational prevention', SPEIS includes every initiative that enables a better understanding of intervention environments, including roads and access points, as well as buildings and special features. Environmental and activity monitoring services are also counted as preventive measures. In both cases, these activities lead to greater effectiveness and safety.

There were 1,976 environmental knowledge and monitoring operations carried out in 2019, representing 9.42% of the total services. In absolute terms, 2019 saw 105 fewer environmental-knowledge and monitoring services carried out than in the previous year.

Of these services and monitoring activities, 88.51% were performed during the day and 11.49% at night.

4.5. Notable services

Fire in a flat in Badalona

We were called out on **5 January** in response to a fire in a flat on **Avinguda del Marquès de Mont-Roig, 244, in Badalona** to assist the Catalan government's Fire Brigade Service. This was a 10-storey building with 2 flats per storey, where, on our arrival, we could see flames coming out of the façade; there were people who had acted hastily and a resident was taken to the outside part of the balcony. We coordinated with the Catalan government's Fire Fighters, dividing our sectors up geographically. Barcelona's Fire Brigade took part with three tanks, two ambulances and a ventilation vehicle.

A total of 10 flats had caught fire, a good part of which completely burnt. The doors of 20 flat were severely affected by the fire, but the building's structure was not affected. Three people died during this intervention.



Fire in a flat on Avinguda Meridiana

We were called out on **28 January** to deal with a fire in a flat on **Avinguda Meridiana, 348**. We came across a 13-storey building where a fire had started in its inner gallery, which was looked out on by kitchen galleries and where hanging clothes and plastic were burning. The fire had started on the eighth floor and quickly spread to the upper storeys, and to the lower ones from falling material that was on fire, which affected, because of the fire and smoke, the utility rooms of all C-door flats from the 8th floor down.

We attended to two people, one with minor burns and the other with a wound on a hand caused from breaking glass. The gas supply to the property was switched off as a precaution.

Industrial fire in the Zona Franca

We received notification on **11 February** of a fire at the **SEAT facilities**, an important vehicle-manufacturing company in the Zona Franca. A fire detector at the historical vehicles museum had been set off and a column of greyish smoke could be seen rise from several locations in Barcelona.

Fifteen fire fighters were sent out, including four heavy tanks, two light tanks, an aerial ladder, an air van, a K-07, a J-11 and two ambulances.

Besides fighting the fire from the roof with the aerial ladder, to prevent its spread, the initial efforts were focused on localising and removing acetylene cylinders.

Two work sectors were established and we managed to get the fire under control after two hours, during which we concentrated our efforts on preventing the spread to the museum's neighbouring warehouse, which ended up unaffected.

The fire caused structural damage to the roof at several levels, roughly in a 2.5 m² area and the total destruction of the loft where the fire had started. 227 people were evacuated by the company itself and one person was attended to for smoke inhalation.



House fire in Sants

It was at 5.23 am on **27 February** that we were alerted by a resident of the building who saw smoke coming from the property at **Carrer de Súria, 6**, and had heard shouts for help. When we arrived there, a fire had broken out on the first floor which was spreading through the inside gallery, and which seriously affected the supply of gas the adjoining building. Three work sectors were established in the intervention, as well as an assessment cell with the GUB [city police], the Mossos [Catalan regional police] and SEM.

A total of eight flats were affected, but there was no structural damage in either of the two properties, and the gas supply was cut. Two people were treated for burns and smoke inhalation and three people attended to and discharged on site for anxiety.

Of the 70 people evacuated and whose details had been recorded, 12 requested new accommodation through CUESB.

Two people found dead on Avinguda de Xile

We were alerted at 9.58 am on **3 March** for the presence of smoke and fire coming from the façade of a property, **No. 42 on Avinguda de Xile** where explosions had been heard coming from the fourth floor. This was an eleven-storey housing block with four flats per storey.

The initial action was established in three sectors: one tasked with carrying out the interior water installation, searching for victims and fighting the fire. The second, made up of officers from the Catalan government's Fire Brigade, reviewed the staircase, closed the doors and checked for opening on the staircase. And the third, located outside and with aerial ladders, carried out smoke- and facade-cooling work to prevent the spread of the fire to the floors above.

Two of the property's flats were affected and their tenants evacuated from them and confined. Unfortunately, the fire caused the death of an 80-year-old man and a 64-year-old woman and a dog.



Call-out to Plaça d' Espanya

At 9.21 pm on **4 March**, we were called out through the 112 emergency phone service to rescue a 6-year-old child who had fallen down a ventilation shaft. The child had fallen down a hole with a 25 cm x 70 cm area and a depth of 3 metres. The hole was for the ventilation of an Endesa electrical facility. Once the facility had been assessed and it had been verified that the electrical substation was separated, the cables were low voltage, the shaft was in good condition and that it was safe to access, a fire fighter was lowered down inside the facility and we proceeded to rescue the child.

As soon as the child was rescued, it was given a medical examination, during which only slight bruising was found. SEM then transferred the child to the Hospital de Sant Joan de Déu as a precaution.

Fire in a flat in Gràcia

On **21 March**, a resident of a property on Carrer de **Nil Fabra, 34-38**, alerted us to a fire in an office block flat. This was a residential building where three storeys had been burnt, one of them the source of the fire.

The intervention was complex owing to the fact that the property had two staircases, which enabled the fire to spread rapidly through the inside gallery, where a spike of fire had broken out in the gas pipes.

All the storeys with access to the galleries were affected, as were all the property's general facilities, and part of the wrought iron had to be supported.

Healthcare officers attended to a total of eight people, one of whom was elderly and had to be hospitalised.

Collapse in the old quarter

We were called by an individual on **4 April** notifying us of a collapse of a wrought iron structure of a mezzanine flat at Carrer dels **Corders, 10**. As we arrived, we verified the collapse of the wrought iron with wooden beam and ceramic vault.

We inspected the rest of the property and decided to evacuate the first-floor flat 2a, the mezzanine flat 2a, the main floor flat 2a and the ground floor premises, and provided support for the part of the wrought iron affected. The property's ground floor shop premises were also sealed off.

The CUESB was activated to find new accommodation for tenants living on the main-floor flat 2a.

Fire at Eixample

Several calls were made at around 2.20 pm on **11 April** informing us of a fire in a building located in Carrer **del Comte Borrell, 5**. This was a ground-floor building dating back to 1900 plus six storeys, where we observed flames coming from a first-floor window and spreading along the façade.

We initially fought the fire from outside, with a 'transitional offensive', and later from inside, through the property's staircase. Once the fire had been put out and the dwellings reviewed, we saw the stone balcony of the first-floor flat 1a had been directly damaged by

its flames and was given support as a preventive measure. The main-floor flat 1a was totally damaged by the fire.

The healthcare services treated seven people for smoke inhalation, and SEM transferred three people to hospital.

Poisoning at Carmel

We were called out by SEM at 3.27 am on **12 April** for collaboration regarding a possible case of poisoning in Carrer de la **Gran Vista, 106**, in the basement flat 2a.

Once we arrived at the place, we inspected the property and measured its CO levels, reaching the conclusion that the poisoning came from a combination of a heater with poor combustion associated with its location over a bucket containing 30 kg of plastic paint at 50% leaking out fumes caused by the heat.

The poisoned fumes travelled through the bathroom to the upper floors, leaving a total of nine people affected, three of whom had to be hospitalised.

Fire in a hospital car park

We were called out at 11 pm on **16 April** to deal with a fire on the floor -5 of the Clínica Corachan's car park, located at **Buïgas, 19**.

This concerned material on fire that was stored on that floor, and the fire was put out with the car park's automatic fire-extinguishing sprinklers.

We then ventilated the smoke remaining in the whole car park and, once those in the clinic verified there was no longer any smoke or carbon monoxide on the floors, authorisation was given for patients to be put in new accommodation as a precaution, who the staff in charge of the clinic had evacuated.

Underground car fires

On **10 May**, we faced two underground vehicle fires, one in a tunnel and the other in a car park.

One of them was at **Plaça d' Ildefons Cerdà**, where a car was on fire, and affected some 200 m with smoke, underneath Plaça Cerdà. One person affected by the smoke was attended to and traffic had to be stopped during the fire-extinguishing process and subsequent ventilation of the tunnel.

The other occurred on Floor -4 of a car park in Passeig de la **Vall d'Hebron, 101**, where the vehicle was completely destroyed. Its smoke affected the underground car park's five floors. One person was attended to.

Diver brigade search

Our diver brigade was called out on **18 May** to collaborate with the GRAE Generalitat to search for a lost fisherman at **Tossa de Mar**.

A surface search was carried out with two teams: Sant Feliu de Guíxols - Sevions and Canyelles - cap de Tossa. Once the search was finished, a request was made for the possibility of further collaboration on later dates.

We collaborated again, on **30 May**, once the lifeless body of the fisherman was found.



Collapse of a gym undergoing building work

Service called out on **23 July** in response to the collapse of a wrought iron structure undergoing building work, with two people trapped in it, in **Carrer de Vila i Vilà, 65**. When we arrived, we verified there had been a collapse of part of the ceiling of the first underground floor in the zone opposite the main façade.

Work was carried out in two areas, one inside where a victim-rescue sector and a support sector were established to secure the work area, and an outside area with an advance command centre and a logistics sector.

The two victims were successfully rescued and transferred by SEM to hospitals, and access to the building was sealed off.



Bush fires on the Collserola mountain range

A bush fire was declared on **3 August** in **Carrer de la Mare de Déu de Port**, where a total of six water tanks, two ambulances and the two command vehicles and a fire fighter helicopter from the Catalan government all took part, with the latter responsible for the mid-upper part of the right flank, given its steep slope. Once the fire had been circled with a ring of water, it came under control, and manoeuvres were begun to soak the entire perimeter with water and attack the hot points inside. The fire was extinguished at 7.30 pm. Some 20,000 square metres of the bush had been burnt.

Traffic accident at Miramar

We were called out on **31 August** owing to a traffic accident involving a two-vehicle collision: a sports car against a tourist bus in **Carretera de Miramar**.

The vehicle was a sports car with three occupants, one in a serious condition who had to be freed from the car and who was transferred to SEM to be taken to a hospital. The tourist bus had 40 passengers at the time; those without injuries boarded another bus, leaving behind the driver and two passengers who were slightly injured and were attended to by healthcare teams.



Providing support for Catalan government fire fighters at another residential fire

We took part on **14 September** at **Avinguda de Manuel Fernández Márquez (Sant Adrià de Besòs)** with three Sant Andreu fire fighter teams and the sector head at a ground-floor flat after our collaboration had been requested from the Catalan government Fire Brigade.

Nautical-environment services

We intervened on **25 September** in two operations carried out in nautical environments. On the one hand, we took part in the search for a newborn baby that had been thrown into the **River Besòs**, working together with the Catalan government's Fire Brigade, a service that lasted for several days and which ended when the lifeless body of the newborn baby was recovered.

Our divers group worked with several agencies at **Sant Sebastià beach** in a security operation involving the possible presence of an explosive device in the water there; it was eventually removed and the operation ended.

Large-scale mobilisations and incidents in the centre of Barcelona

The Municipal Civil Defence Plan was activated on the alert stage on **13 October** owing to the risks occurring in Barcelona owing to several public mobilisations in the **city centre**.

We actively took part in extinguishing fires in numerous containers and other urban elements resulting from the riots occurring among protest gatherings called out to the city centre.

The type of interventions involved required considerable coordination with the city's other emergency forces; their management established two traffic points coordinated by sector heads which provided access and the immediate availability of our resources.



Recovery of a car that had fallen into the sea

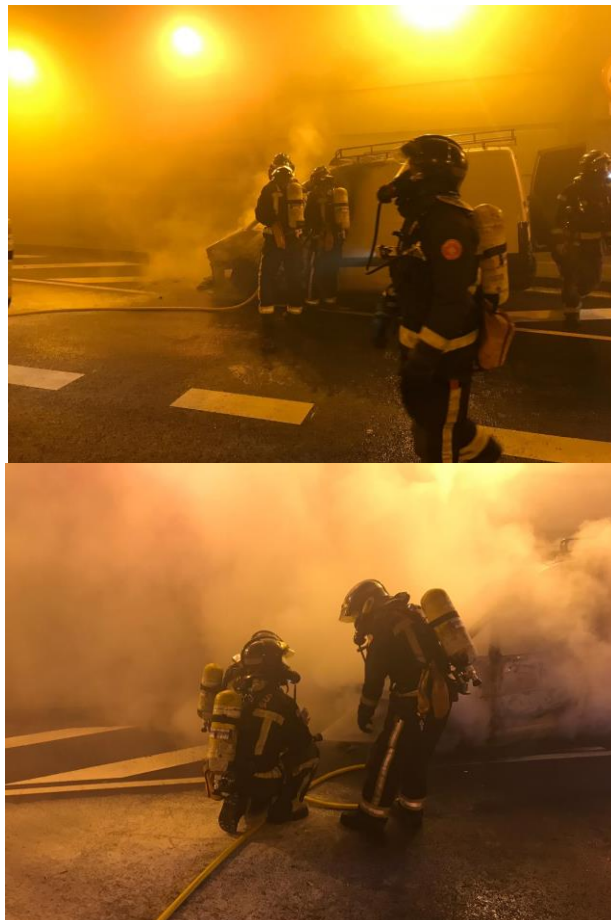
On **10 November**, we worked on recovering a car from the **Passeig marítim de la Mar Bella's** platform. A Seat Alhambra car was in the water, practically submerged.

Our team of divers connected a cable to the C-13's winch and pulled it out of the water to a safe area. The vehicle had apparently moved backwards while the owner was unloading a boat.

Vehicle on fire inside the Les Camèlies tunnel

A transport van caught fire on **28 November** inside the **Les Camèlies tunnel**. The tunnel, some 380 metres long with two separate directions of traffic lanes, required one team at the Llobregat (Escorial) entrance and the other teams at the Besòs (Sardenya) entrance. When we arrived, we saw heavy, dark-grey smoke coming out of the mouth of the tunnel along the ascending direction (Besòs). The fire was extinguished using the tunnel's own fixed facilities.

Once the fire had been put out and the area cooled, forced ventilation was applied to the tunnel and its interior levels of gases were checked. After these checks had been made, the Cleaning Service was activated and the Guàrdia Urbana [city police] notified, to manage the removal of the vehicle and enable the resumption of vehicle traffic in the tunnel.



Windy December

There were strong bouts of wind in the city on 13 and 22 December. We carried out 101 wind-related operations on 13 December: 30 to do with trees and 71 with various inspections (cleaning up, securing and removal of elements at risk of falling, scaffold, awnings, etc.) There were 70 wind-related operations on 22 December.

Serious fire on C/ Enamorats

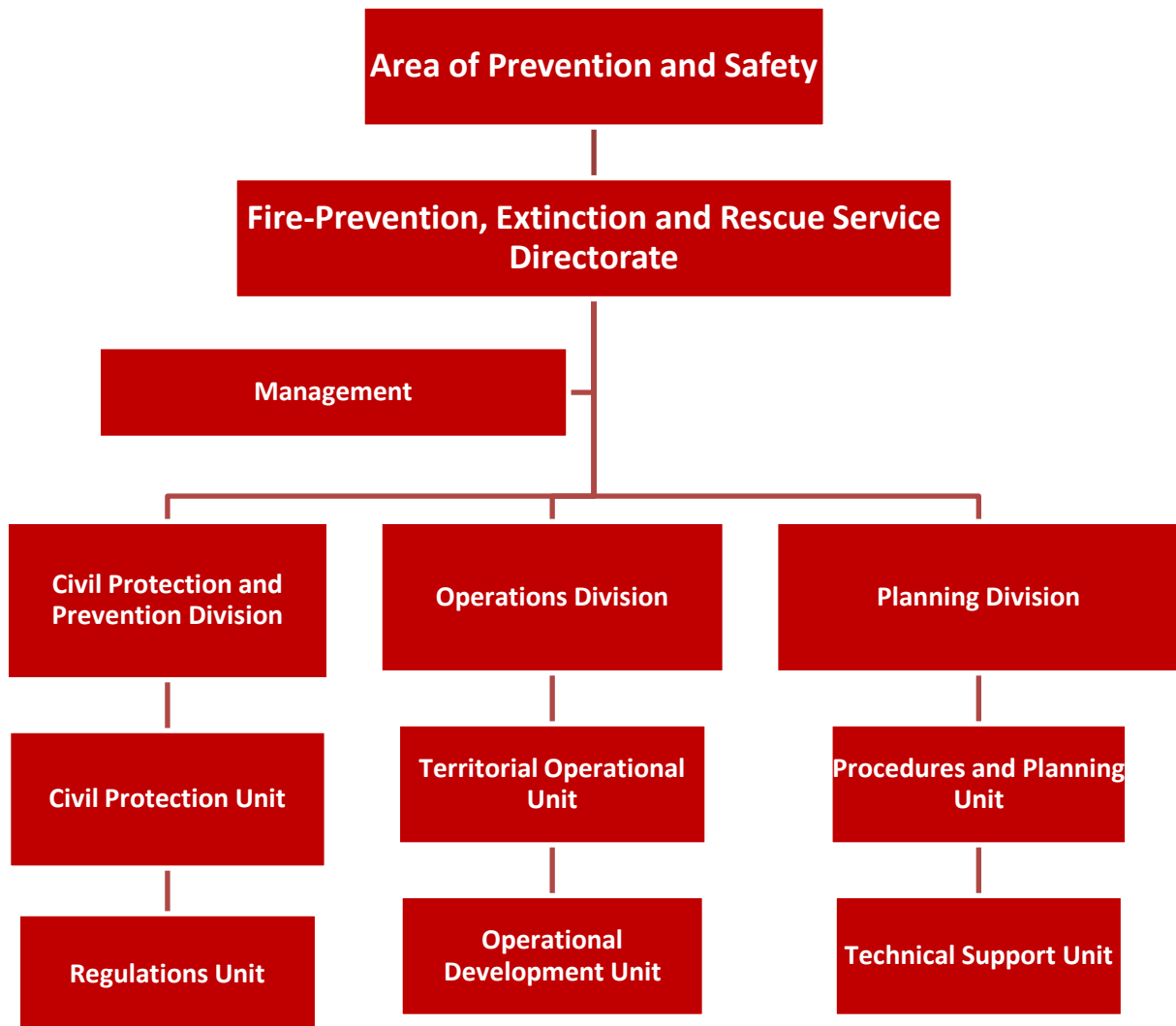
On **18 December**, we put out a fire affecting several flats in a property in Carrer dels **Enamorats, 45**, given that the fire spread through the staircase's inner gallery. The property had an access point through C/ **Aragó, 486**. The fire, which proved to be very strong, affected 26 people in various ways, some of whom were transferred to hospitals. The premises had a loft with a light structure and it collapsed, as did part of the wrought iron between the premises and the main floor flat 3a.





5 People

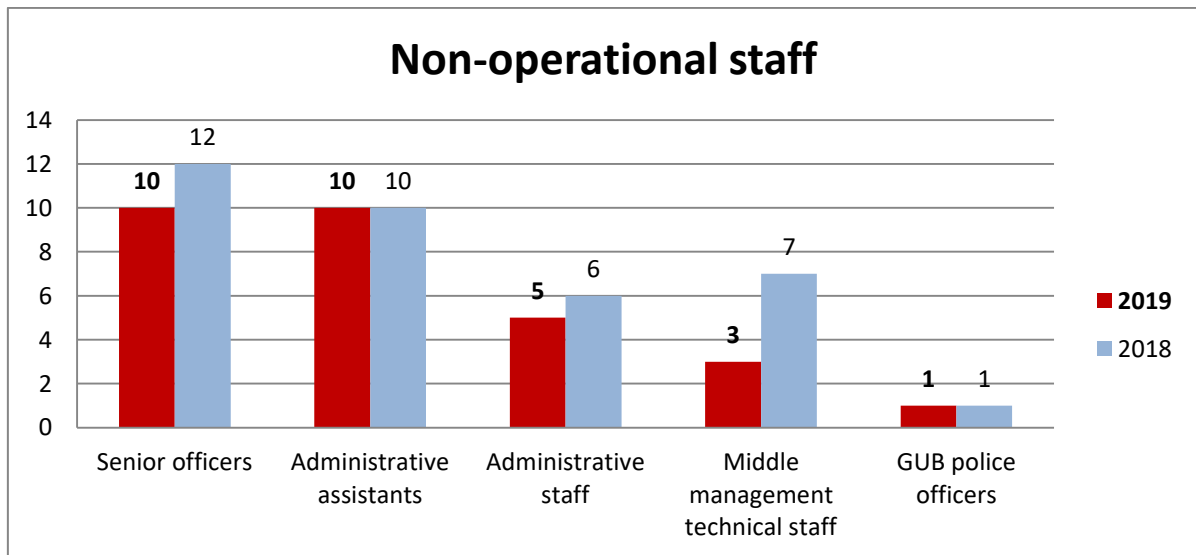
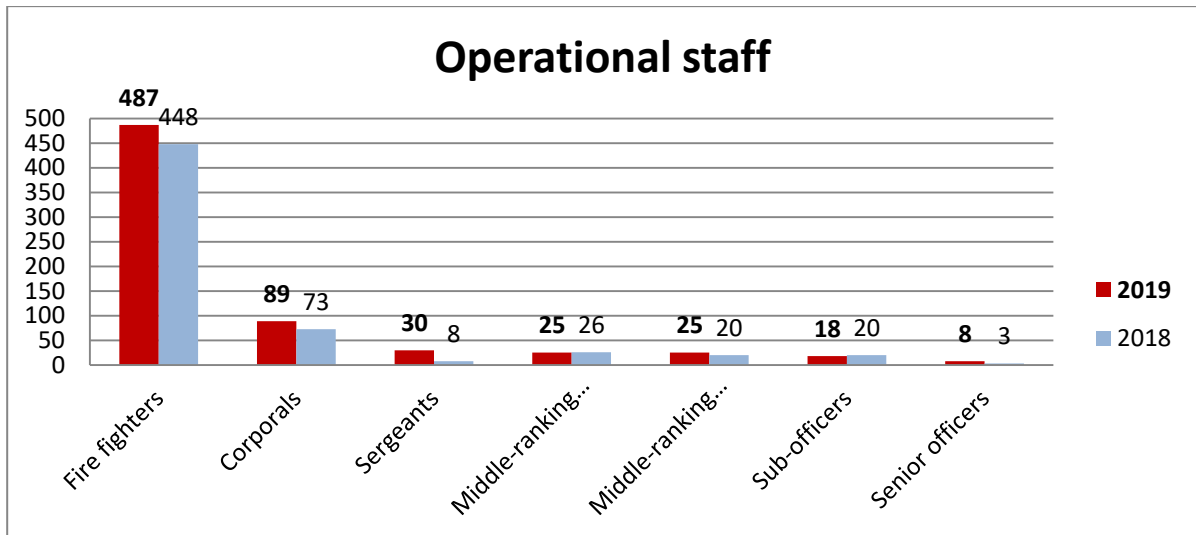
5.1 Organisational Chart



5.2 Breakdown of staff

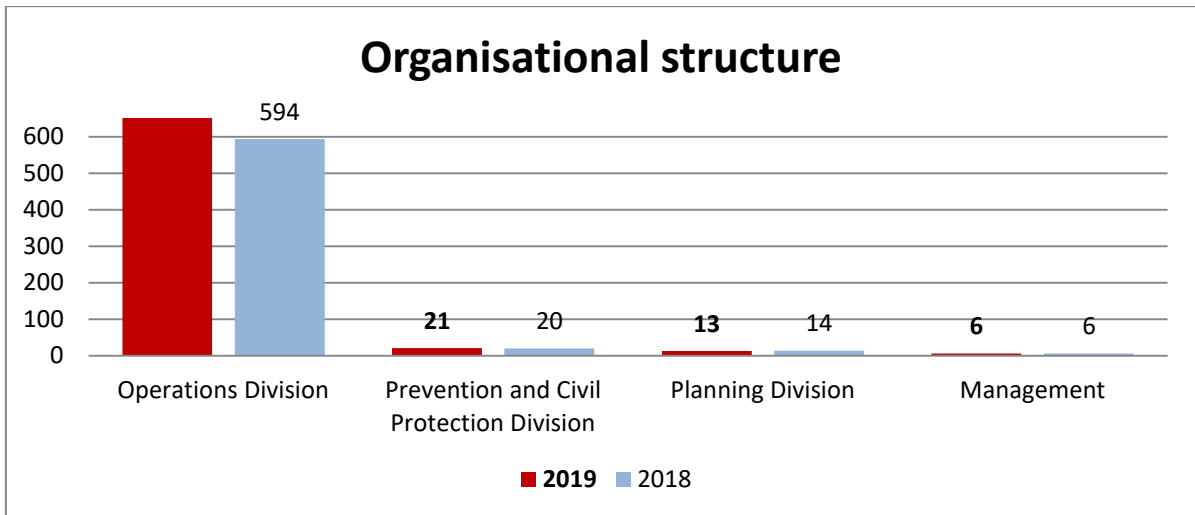
Compared to the previous year, the SPEIS workforce saw a notable increase in its number of operational staff as a result of recruitments, which helped to balance the deficit in the number of fire fighters that repeatedly occurred as a result of staff leaving to retire.

Professional categories	Men		Women		TOTAL 2019	TOTAL 2018
a) Operational staff						
Senior officers	8	1.2%	0	0.0%	8	3
Middle-ranking officers	23	3.5%	2	12.5%	25	20
Middle-ranking nursing officers	18	2.7%	7	43.8%	25	26
Sub-officers	18	2.7%	0	0.0%	18	20
Sergeants	30	4.5%	0	0.0%	30	8
Corporals	88	13.2%	1	6.3%	89	73
Fire fighters	481	72.2%	6	37.5%	487	448
TOTAL Operational staff	666	100.0%	16	100.0%	682	623
b) Non-operational staff						
Senior officers	7	43.8%	3	23.1%	10	12
Middle management technical staff	1	6.3%	2	15.4%	3	7
Administrative staff	3	18.8%	2	15.4%	5	6
Administrative assistants	5	31.3%	5	38.5%	10	10
GUB police officers	0	0.0%	1	7.7%	1	1
TOTAL Non-operational staff	16	100.0%	13	100.0%	29	36
	682		29		711	659

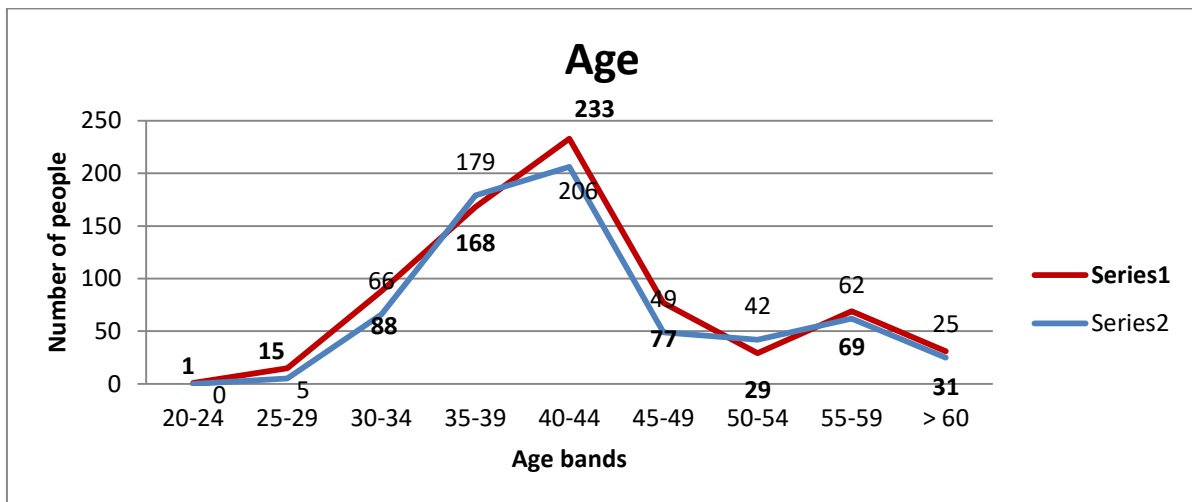


The organisational structure breaks down as follows:

Organisational structure	Operational staff		Non-operational staff		TOTAL 2019	TOTAL 2018
	Count	Percentage	Count	Percentage		
Management	2	0.3%	4	13.8%	6	6
Operations Division	662	97.1%	9	31.0%	671	594
Prevention and Civil Protection Division	10	1.5%	11	37.9%	21	20
Planning Division	8	1.2%	5	17.2%	13	14
TOTAL staff	682	100.0%	29	100.0%	711	634



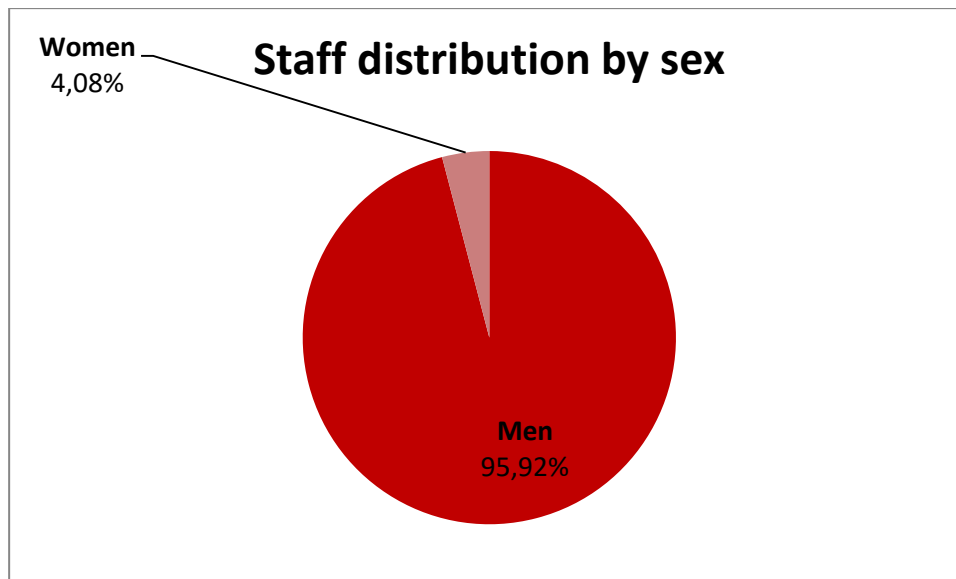
The average age of operational staff on 31 December 2019 was 42.33, representing a slight increase on the previous year, having been 42.72 in 2018.



5.3 Women in the Barcelona Fire Brigade

The incorporation of women into Barcelona Fire Brigade is a relatively recent phenomenon (2007), which is why females account for such a small percentage of staff members. For this reason, the City Council has been introducing positive-discrimination measures for women in recruitment processes (in cases where they get the same scores as men). This will benefit women candidates in forthcoming recruitment processes.

The variation of figures between 2018 and 2019 in distribution by sex is minimal, and the drop that occurred in the group of operational women (from 17 in 2018 to 16 in 2019) can be explained by a single automatic leave of absence based on incompatibility.



Promoting the recruitment of women to the force

The terms and conditions published in July governing that year’s Fire Brigade job vacancies introduced a series of important new features compared to previous years, to promote the recruitment of women into the force by incorporating the gender perspective, eliminating requirements that put obstacles in the way of women’s recruitment and adapting the requirements to the current fire fighter model following an analysis of their duties.

One of the important new developments was the elimination of minimum and maximum height requirements for candidates, for women and men alike (previously women had to have a minimum height of 1.55 metres and men of 1.60, and not in excess of 1.95 metres in any case).

As for the competitive exams stage, the main changes were as follows:

- Healthcare was incorporated into the profession tests, bringing with it a gender-free perspective. Up to then, there had only been three highly masculinised professional areas (construction and civil engineering, electrical installations and mechanics).
- The fourth test (physical aptitude) also saw a few changes in test types and their assessments:
 - The *navette*-course, agility-circuit and swimming-circuit tests were kept. Since the physical tests now scored points, the test criteria were gradually adapted.
 - Pull-up and mannequin-dragging exercises were incorporated, more closely linked to fire fighter daily activities, whereas bench weight lifting and horizontal-jumping tests were eliminated, as such skills were no longer

regarded as particularly linked to the tasks and duties carried out in the force.

If there was a tie after the tests had been completed at this stage, it would be decided in favour of the candidate whose gender was less represented, as established in all the other terms and conditions of the municipal selection processes.

Finally, as for the competitive exams, qualifications in physical and sports activities concurs were assessed as a merit, and healthcare activities were extended. In any case, the importance of this stage within the overall competition process was reduced.

The competitive exams process will finish in 2020.

‘Women in Fire Brigades: a gender perspective’ day event

See Section 1.2.

Meeting of the Commission for Women in Fire and Rescue Services

See Section 1.2.

5.4 Staff management

There was a 7.58% absenteeism rate among SPEIS operational staff in 2019. More specifically, 299 officers were on sick leave and there were 539 cases of temporary incapacity for work, representing a total of 9,005 days off work. In the case of non-operational staff, there were 21 cases of sick leave, involving 10 people, totalling 438 days.

The most notable steps taken to reduce levels of absenteeism include the monitoring of sick-leave cases (sometimes by calling in the person concerned); adapting workplaces; the work carried out by the Manager’s Office inspection team, contacting health centres in order to shorten waiting lists for medical tests, appointments and surgical operations; authorisation for rehabilitation during service hours in order to shorten the duration of sick leave; and coordination with the City Council’s medical inspection team.

On the other hand, given the nature of its work, the Barcelona Fire Brigade has one of the highest levels of work-related accidents. More specifically, 66 accidents leading to sick leave were recorded in 2019, corresponding to a total of 2,391 accident-related and relapse sick-leave days. This data includes accident-related sick-leave days due to accidents travelling to or from work and relapses from previous accidents.