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Jokela School Shooting on 7 November 2007

Report of the Investigation Commission



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Abstract

On 7 November 2007 a bloody deed took place in Jokela where a senior high school student shot eight persons and himself in a school centre. The reasons for the school shooting were multifarious and complex, and the shooting constituted a deliberate criminal act showing the methodical nature that constitutes an essential element of murder. The marginalization of the perpetrator was of a special kind, the result of several contributory factors. The family, upbringing and the school community but also society as a whole, nowadays including the Internet environment, are in a prime position for preventing marginalization.

To prevent school shootings, time consuming work has to be carried out simultaneously on different fronts to find solutions to several issues. The Investigation Commission presents 13 recommendations to reduce the probability of school shootings and lessen the harm done by them. Many of the recommendations involve the prevention of marginalization.

According to the Investigation Commission, student care should be developed so that the resources will correspond to recommendations, the work will be systematic, efforts will be made to actively identify the problems of the students and the performance of support measures ensured. Mental health services should be developed so that cooperation between basic health care, specialised health care and the social services will be smooth and a young person in need of help will get the best possible comprehensive care. Systematic and well-functioning practices to prevent bullying should be actively used in the schools. Intervention against school bullying should be made at an early stage and the situation followed up.

The perpetrator found both models for the school shooting and like-minded discussion partners on the Internet. With the help of the Internet he was also able to ascertain the motives and thoughts of previous school shooters. In addition, he used the Internet to get publicity for his act. The Investigation Commission recommends that the Internet should be more comprehensively moderated and the web tip information system of the police enhanced. Among other things, the criminalisation of the preparation of an offence against life could give the police a better chance to pinpoint the identity of a person planning such an act.

The Investigation Commission also takes a position on the development of the co-operation between the police, the Department for Rescue Services and the paramedic services as well as on the improvement of official information. The improvement of the work of the media is considered separately on the basis of a separate statute on the investigation of the event, and the Investigation Commission recommends stricter self-regulation.

Keywords					
school shooting, Jokela, marginalization, student care, school bullying, guns, Internet, security recommendation					
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FOREWORD

On 7th November 2007, a bloody deed took place in Jokela when a student in upper comprehensive school shot eight people, then himself, in a school centre.

As this was not an accident but a criminal act, an investigation commission could not be appointed on the basis of the Accident Investigation Act (373/1985). Because of the social significance of the incident, the need arose to determine, in a manner reminiscent of accident investigation, what measures could be taken to prevent similar events in the future or lessen the harm done by them.

As a result of the incident, the Ministry of Justice appointed on 27th November 2007 a working group to prepare the appointment of an investigation commission to investigate the Jokela shooting. The task of the working group was to identify the issues that had to be investigated and clarified. On the basis of the results produced by the working group, the Act on the Investigation of Certain Fatal Incidents (662/2008) was prepared, pursuant to which the government appointed an investigation commission on 6th November 2008. The act necessary for appointment of the Investigation Commission was prepared by Ministry of Justice Legislative Secretary Liisa Vanhala, in co-operation with the Jokela working group.

With the exception of one individual, all members of the working group were appointed to the Investigation Commission. The following members constituted the Investigation Commission:

Chairman Tuulikki Petäjäniemi, LL.M.

Members Jarmo Littunen, Director General, Ministry of Justice

Janne Koivukoski, Director of Rescue Services, Ministry of the Interior

Robin Lardot, Inspector General, Ministry of the Interior

Eeva-Riitta Pirhonen, Counsellor of Government, Legal Affairs,

Ministry of Education

Kristiina Pietikäinen, Deputy Director-General, Ministry of Transport

and Communications

Tom Silfvast, Senior Medical Officer, Ministry of Social Affairs and

Health

Maire Kolimaa, Senior Officer, Ministry of Social Affairs and Health

Tuomo Karppinen, Director, Accident Investigation Board

Secretary Kai Valonen, Chief Accident Investigator, Accident Investigation Board

In the early stages of the investigation, Director Sakari Karjalainen from the Ministry of Education was also a member of the working group.

This investigation report was drawn up by the Investigation Commission on the basis of the investigation and in accordance with standard accident investigation procedure. The first part of the report contains the relevant facts and describes the unfolding of the events and their background. It also presents general investigation data related to the incident and describes the conduct of the media in Jokela. In the second part, the

Investigation Commission analyses the investigation data, assesses the significance thereof, and presents its conclusions on the incident. Measures already taken follow next. The recommendations of the Investigation Commission are given at the end of the investigation report.

The investigation was aimed at the prevention of similar incidents and the improvement of safety, so no consideration was given to questions involving guilt or compensation. The investigation report was not written to be used in a court of law; therefore, its content and style do not correspond to legal practice.

The investigation material is held by the Accident Investigation Board of Finland.

CONTENTS

1	DESC	CRIPTION OF THE INCIDENT AND POLICE AND RESCUE ACTIVITIES	13
	1.1	General description	13
	1.2	The locale and weather conditions.	13
		Preparations for the shooting and the events of 7 November 2007	
	1.4 1	Immediate action taken by the authorities	21
		1.4.1 Alerts	21
		1.4.2 On-site operations	23
		Psychosocial support	34
		Identifying the victims, informing the families, and investigating gunshot wounds	40
	1.7 l	Damages	43
		1.7.1 Personal injury and damage to property	43
		1.7.2 School threats following the Jokela incident	44
2	BAC	KGROUND INFORMATION	45
		Description of the site and the instruments of crime	
		2.1.1 The school building	45
		2.1.2 The weapon and ammunition	45
		2.1.3 Lighter fluid and matches	46
		The circumstances	
		The organisations and people involved in the incident	
		2.3.1 The perpetrator	47
		2.3.2 Jokela Upper-Level Comprehensive School and Upper Secondary School	51
		2.3.3 The organisation and methods applied for student and pupil welfare	54
		2.3.4 Youth services	56
	2.4	The organisations' crisis prevention and preparedness for exceptional circumstances	57
		2.4.1 The school	
		2.4.2 The police	
		2.4.3 Emergency Medical Services	
		2.4.4 The Rescue Services	
		2.4.5 The Voluntary Rescue Service, the Finnish Red Cross, and psychological support provided by the Church	64
		2.4.6 Victim identification procedure	64
		2.4.7 The Internet and the media	65
	2.5 1	Rules, regulations, instructions, and other documents	68
		2.5.1 Instructions concerning the degree of preparedness and prevention in schools and on student welfare authorities	68

2.5.2 Instructions concerning police preparedness and prevention	78
2.5.3 Instructions on Emergency Medical Services preparedness and prevention	
work	
2.5.4 Instructions concerning Rescue Services preparedness and prevention	81
2.5.5 Legislation governing youth work	82
2.5.6 Firearms legislation	82
2.5.7 Government communications in crisis situations and exceptional	
circumstances	84
2.5.8 Rules, regulations, and instructions concerning the media, the Internet, and computer games	85
2.5.9 After-care legislation	89
2.5.10 The Penal Code	89
2.5.11 The National Strategy for Combating Violence	
2.5.12 The Internal Security Programme	91
2.6 School killings in other countries	92
2.7 Protocol for threat assessment in schools	96
GENERAL RESEARCH DATA CONCERNING THE JOKELA INCIDENT	97
3.1 Juvenile homicide in Finland	97
3.2 Crime in Tuusula and Jokela	98
3.3 Violence against adolescents	98
3.4 School bullying	99
3.5 Psychotropic medication	
3.6 Effects of playing computer and Internet games	104
CONDUCT OF THE MEDIA	107
4.1 Petition on the conduct of the media	107
4.2 Conduct of the media	107
4.3 Journalistic codes of ethics	109
4.4 Guidelines for journalists, published by the Council for Mass Media in Finland	1 109
4.5 Articles 8 and 10 of the European Convention on Human Rights	
4.6 The Council for Mass Media decisions on media coverage of the Jokela incide	
4.7 Journalistic training.	112
5 ANALYSIS AND CONCLUSIONS	115
MEASURES TAKEN	127
7 RECOMMENDATIONS	133
7.1 Development of pupil and student welfare	133
7.2 Clarification of treatment recommendations in mental health services for	124
adolescents	134

7.3 Prevention of bullying	135
7.4 More stringent firearm legislation and reduction in the number of guns	135
7.5 Systematic improvement of overall safety in schools	136
7.6 Moderation of the Internet	136
7.7 The Police Tip Line Programme	137
7.8 Criminalisation of preparation to commit an offence against life	137
7.9 Development of co-operation among various authorities	138
7.10 Improvement to official communications	138
7.11 Promotion of self-regulation in the media	138
REFERENCES	141

1 DESCRIPTION OF THE INCIDENT AND POLICE AND RESCUE ACTIVITIES

1.1 General description

On 7 November 2007, a student at Jokela Upper Secondary School entered the Jokela School Centre in the middle of the school day and, using a pistol he had legally purchased, shot six upper secondary school students, the head teacher, the school nurse, and finally himself. The data related to the immediate events are reproduced from the material concerning the criminal investigation conducted by the police, but the description of the authorities' activities is mainly based on the information gathered by the Investigation Commission.

1.2 The locale and weather conditions

Jokela is one of the municipal centres of Tuusula, as are Hyrylä and Kellokoski. Jokela is the northernmost population centre of the municipality, located on the main railway line about 50 km from Helsinki, 10 km from Hyvinkää, and 13 km from Järvenpää. The distance between Jokela and the Tuusula municipal centre of Hyrylä is about 20 km.

The school centre is in central Jokela, west of the main railway line and about 500 metres south-west of the railway station. The street leading to the school centre is a dead end, so there is very little traffic on it. On the north side of the school are some fields and a car park. Behind these are the Jokela Community Centre and a day-care centre. On the east side, there is a pond. The school centre area is bordered on the south and west by a residential area.

The total population of the municipality of Tuusula is 36,000, over half of whom live in Hyrylä. The population of Jokela is 5,300.

According to the Finnish Meteorological Institute, the weather was overcast and dry at the time of the incident. The temperature was between 0 °C and 1 °C, and the relative humidity was 98 per cent.



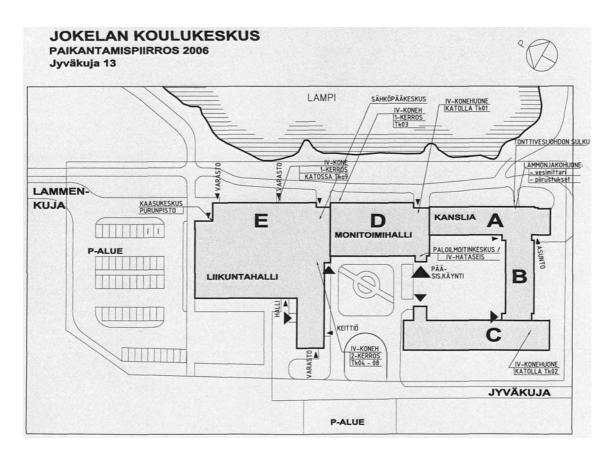
Picture 1. The Jokela School Centre viewed from the direction of the pond (police material).



Picture 2. The location of Jokela (map from KTJ / Ministry of Justice / NLS).



Picture 3. Jokela. The school centre is indicated by the circle in the centre, south-west of the pond (map from KTJ / Ministry of Justice / NLS).



Picture 4. The Jokela School Centre.

1.3 Preparations for the shooting and the events of 7 November 2007

The perpetrator had been planning the school shooting at least since early March 2007. Around that time, he wrote an entry in his diary in which he said he was going to initiate an operation against humanity with the purpose of killing as many people as possible and causing havoc and mayhem around him. He wrote that he would be armed and ready to carry out the operation by autumn at the latest. Later, in March 2007, he wrote that he would probably die himself in carrying out the operation. He wrote that it was his wish that his deed would be remembered forever and that it would make a lasting impact on the world. He also believed other people would follow in his footsteps.

The perpetrator admired the school killings perpetrated in other parts of the world and, for instance, on 16 April 2007 expressed his joy over the killings at Virginia Tech that day. A few days later, on 20th April 2007, he celebrated the anniversary of the Columbine school killings in his diary but said he regretted that the killers' propane bomb failed to explode. On that same day, he wrote what are believed to be his first comments in an Internet discussion forum dedicated to the Columbine school killers.

In May 2007, the perpetrator began writing his 'Natural Selector' manifesto entitled 'How Did Natural Selection Turn Into Idiocratic Selection?'. He uploaded both the Finnish and English version of his manifesto to the Internet late on 5 November 2007 and was still putting the finishing touches to them as late as the night before the incident.

In August 2007, other youngsters noticed that his behaviour had become unusual and told a youth worker about their concern. This youth worker received similar reports from several young people up to the end of October 2007. The perpetrator behaved threateningly toward other youngsters, saying that they would die as a result of a white revolution. The young people were concerned about the perpetrator and felt he could harm himself or somebody else. The youth worker approached the perpetrator and talked with him three times, for the last time in early November. In these discussions, the perpetrator did not mention the possibility of a violent or any other act. On two occasions, the youth worker also talked to the head teacher of the school, who said that he was aware of the perpetrator's words and he would keep an eye on him. As he was 18 years of age, the perpetrator was able to prevent the school authorities from contacting his parents about the issue.

Also in August, the perpetrator went to a shooting range and was allowed to fire a shot with a weapon owned by the local shooting club. In October, he acquired a firearm permit, and he bought a gun and ammunition in a gun shop on 2 November 2007. He went to the woods on 5 November 2007 to practise firing the gun and uploaded video clips of this to the Internet.

On the last days before the school killings, the perpetrator actively participated in the Internet community focusing on the Columbine school killings. For instance, he published a picture of his gun and a video montage he had compiled from surveillance camera material from the Columbine school killings. The perpetrator engaged in long private discussions with one community member via Internet Messenger (an instant messaging program) on the two nights preceding the incident. In these discussions, he quoted the Columbine school shooter and implied that he would go to school armed with his gun, but when asked for details he could not provide any answers.

On the night preceding the incident, the perpetrator created and edited several text files, including a farewell message to his family, for example. In his message, he said he was committing this act to make society a better place to live in. He hoped that things would turn for the better, to make acts like this unnecessary. The last entry in his computer event log was made on 7 November 2007 at 1:57am.

On the day of the incident, 7th November 2007, the perpetrator did not go to school for his first lesson but instead started surfing the Web at 8:37am. At 9:33, he uploaded to YouTube a video file that showed first the school centre viewed from the pond and after that a reddish image of the perpetrator pointing a gun at the camera. Industrial rock music provided the soundtrack for this clip. After 11am, he further edited the text, video, and sound files and sent a message to the school killings Net community saying history would be made that day.

The day he had chosen to carry out his plan was the 70th anniversary (according to the modern calendar) of the October Revolution. The perpetrator switched off his computer at 11:28am and soon after that mounted his bicycle, heading for the school centre 1.7 km away. He arrived at the corner of the school closest to the pond at approximately 11:37am and entered the basement through the door below the school canteen. At this point, lessons were under way and the upper secondary school students were having lunch.

The perpetrator met an upper secondary school student (the first victim) in the corridor, shot him at approximately 11:42, and moved on to the lavatories in the ground-floor corridor. Several students in the corridors noticed a boy lying on the floor and thought he had bumped his head. Some of these students had heard sounds, which they did not, however, recognise as shots. While some students called the Emergency Response Centre (ERC), the perpetrator, standing in the lavatory doorway, shot first one (victim 2) and then another (victim 3). One of the students recognised the shooter. As the school nurse came running to the ground floor and realised someone had been shot, she shouted for the others to leave the building and after that called the ERC. During the phone call, the perpetrator shot another student (victim 4) outside the lavatory and ran after the school nurse, who was trying to escape through the corridor. The perpetrator shot the school nurse (the fifth victim) and after that yet another student (victim 6) in the same spot in the corridor. It was now 11:46am; these six victims were killed within four minutes.

The deputy head teacher was in the staff room or in his office near it when a girl arrived to tell her that there was a gunman in the building. The deputy head went to the head teacher's office and told her that somebody was shooting in the school. At 11:47am, the head teacher made an announcement over the PA system telling everybody to stay in the classrooms and that no-one was to leave the classroom. After this, the perpetrator fired several shots (in total, 53 cartridge cases were found on the ground floor) in the corridors, shouting: 'I'll kill all of you!'. However, he did not shoot a student's mother who happened to enter the building. After this, he tried to enter one of the ground-floor classrooms and shot three times through the door, wounding a student in the foot.

The perpetrator went two floors up, to the second floor of the building. Two students were sitting there on a bench in the corridor. One of them managed to escape the gunman, but the other was fatally wounded (victim 7). Three cartridge cases were found in the corridor. The perpetrator sprayed a flammable liquid on the corridor wall and unsuccessfully tried to light it with matches. After this, he descended to the corridor in front of the school canteen, on the first floor, and tried to enter the canteen. The sliding glass doors had, however, already been closed and locked. The perpetrator demanded that the doors be opened and then shot through the glass doors, hitting some chairs behind them. The people in the canteen managed to escape through the other end of the canteen into the rooms behind the kitchen. It was now around 11:54am. Five cartridge cases were found in the corridor by the canteen.

At about this time, the head teacher and the education welfare officer exited through the ground-floor door of the old school building to the pond side of the school. The head teacher stopped between the school building and the pond to talk on the telephone. The education welfare officer left for the car park next to the sports hall and went to one end of the car park to guide the rescue vehicles to the scene. Just then, the perpetrator came out, cursing, through the exit below the canteen and the welfare officer fled, running to the field. When the perpetrator was seen next, he was near the exit closest to the pond, which was also where the head teacher was at the time. The perpetrator shot the head teacher (the eighth victim) several times. It was 11:57am. Seven cartridge cases were found in this location.

The perpetrator entered through the door at this location and ascended to the first floor, where he tried to open the staff room doors, shouting: 'Come out, all of you; I'll kill you!'. At the end of the corridor was a comprehensive-school classroom, which the perpetrator entered through the open door. He pointed his gun at the students, told them there was a revolution on, and told them to start breaking things. The perpetrator fired two shots, one at the television set and the other at the window, but did not try to shoot the students. Two cartridge cases were found in the classroom.

A few minutes past noon, the perpetrator was walking along the first-floor corridor in front of the staff room. At this point, the first policemen and ambulances were already on the scene, near the area of the inner court. The perpetrator tried to fire through the windows at an oblique angle in the direction of the inner court, but the bullet failed to penetrate the window. After this, the perpetrator took up a position near the main entrance, from which he fired two shots at 12:04pm at the policemen who were approaching him and giving orders. One cartridge case was found in the corridor and two at the main entrance.

The perpetrator then walked to the lavatory next to the canteen, on the same floor, where he shot himself in the head, which resulted in his demise later that day (the ninth casualty). One cartridge case was found in the lavatory.

As judged by the cartridge cases, the perpetrator fired a total of 75 shots in the school centre. All told, 328 unused cartridges were found: 250 in the shoulder bag he was carrying with him, 59 in his pockets, 15 in the school centre, three in the pistol, and one at his home.

Self-rescue

The first student to call the ERC ran up the stairs from the corridor to the staff room, shouting on his way that somebody was shooting in the school. The phone connection to the ERC remained open while this was happening. Despite the hysterical state of the student, it soon became apparent in the staff room that somebody was indeed shooting in the building. The education welfare officer took the student's mobile phone and resumed communication with the ERC.

Five teachers went downstairs to find out what had happened. The first teacher to reach the ground floor shouted to the others: 'Don't come over here – somebody's shooting there!'. The teachers started to run for safety. One of them ran into the canteen, told the students there to leave the building, and locked the canteen doors. The students exited via the loading dock door.

The teachers in the staff room remained in contact with the ERC and, according to one of the teachers, received instructions to stay inside behind locked doors. Around this time, the deputy head went to the head teacher's office and asked her to tell everybody over the PA system to stay in the classrooms. Because of the exceptional tone of the head teacher, some of the teachers and students realised that something serious was going on. Others thought it was a drill. Some classroom doors were locked as requested by the head teacher in her announcement. The fire doors leading from the hallway to the

corridor were shut also. Some students and staff members hid in places such as lavatories and storage rooms.

One of the teachers told the students in the lounge to return to their classrooms. Some of the students did so and locked the door. Having heard the head teacher's announcement, another teacher left his classroom to find out what was happening, telling the students not to leave the room. Soon the teacher returned and then went out again. In the administrative corridor adjacent to his classroom, he and two other teachers came face to face with the gunman and ran away. Once outside, the teacher went around the school building to his classroom windows and, by shouting and using hand signals, told them to leave the classroom. Some of the students exited into the corridor, where they ran into the gunman. The students entered another classroom, with the shooter following them, where he fired a shot at the television set and another at the window. After the gunman had left the classroom, the students jumped out through a second-floor ventilation window and ran for safety.

In some classrooms, the teacher and students broke a window and all escaped through it. In one classroom, the students and the teacher signalled for the policemen outside to break the window, which they did, then helping the students out. However, in most of the classrooms the students were able to leave only when the police came to evacuate the room. According to their own estimate, the police managed to evacuate 150 to 200 people from seven or eight classrooms in about half an hour.

The teachers in the staff room had received information on the identity of the shooter early on. The students called each other, friends, and parents on their mobiles, and word of what was happening spread rapidly both within the school and outside. Some of the students received a call from outside the school telling them what was happening.

1.4 Immediate action taken by the authorities

1.4.1 Alerts

The authorities were alerted first when one of the students made an emergency phone call at 11:43:14 to the Emergency Response Centre of Central Uusimaa, telling them about a student who was bleeding from a wound to the head. The student thought the injured student had fallen and bumped his head. The ERC operator classified the assignment as 'a fall', with a level of urgency B¹. Each assignment code is assigned a

In the ERC risk assessment system, an assignment is awarded an A, B, C, or D urgency classification on the basis of the medical risk or injury mechanism. In A- and B-type assignments, an ambulance unit is immediately dispatched to the scene as an emergency assignment. Type-C assignments are performed as so-called normal assignments. In a class-A assignment, the paramedics know that a doctor will be arriving with the ambulance, whereas in a class-B assignment they will not be assisted by a doctor.

⁻ Urgency class A: A patient is classified as high-risk when his or her vital functions show an immediate threat to life.

Urgency class B:

⁻ Urgency class C: The risk is low. The normative response time is 30 minutes.

Urgency class D: There is no risk involved in the assignment. The normative response time is at maximum two hours.

predetermined response in terms of the units to be alerted. The standard response for this assignment code was two ambulance units, which, according to the emergency report, were alerted at 11:44:11. While the ERC operator was alerting the units, shots could be heard in the background, which the operator either failed to identify as such or did not hear while busy alerting the units. The caller tried to tell the operator that he had seen a hand holding a gun pointing through the lavatory door. However, the caller was in a state of panic and the ERC operator did not immediately grasp the nature of the situation. By 11:46am, the operator had managed to determine that a gun was involved. This also became evident when at 11:45:45 another operator at the ERC received an emergency call from the school, in which the caller immediately said there was a shooting incident in the school.

At 11:46:18, the Emergency Response Centre alerted the police patrols, of which Patrol 856 in Järvenpää and Patrol 851 in Kellokoski reported that they would head for the school. The distance between the patrols and Jokela was approximately 13 and 10 kilometres, respectively.

The assignment was reclassified at 11:46:38 as 'a shooting', in emergency assignment class A. In accordance with standard policy, a mobile intensive care unit was included in the response, and a rescue unit of the Central Uusimaa Rescue Department was alerted at 11:46. The mobile intensive care unit alerted was the Mediheli ambulance helicopter, and the rescue unit was needed as a supporting unit.

The ERC soon informed the police patrols that three people might have been shot in the school. The Central Uusimaa Provincial Police Command field commander ordered all five Central Uusimaa patrols to the site and asked the two Hyvinkää patrols to reinforce them. He also asked the ERC to inform the Police Readiness Unit in Helsinki of the situation. The field commander gave the situation commander a situation report and issued tactical orders and instructions concerning, for instance, policemen's work safety.

At the time of the incident, the Police Readiness Unit was in the middle of an exercise; they first received word of the events at 11:50am. At 11:55, the Helsinki Provincial Police Command's chief inspector on duty called the readiness unit and told them that somebody had been shot in Jokela. While the call was still in progress, eight readiness unit policemen were ordered to leave the exercise and go to Jokela. On the basis of the additional information received later, the exercise was terminated at noon and the rest of the 15 policemen involved in it were ordered to Jokela. Fully equipped, all of them were on their way to Jokela by 12:10. Three policemen with a police dog who were participating in an exercise in a municipality near Tuusula were ordered to the site, as were the 10 readiness unit policemen who had been involved in an exercise elsewhere. In total, 45 readiness unit policemen participated in the operation, of whom 36 were recalled from exercises and nine alerted at home.

When the Mediheli doctor was alerted, he was in the Meilahti Hospital area handing over a patient and the helicopter was being refuelled at its base at the Helsinki–Vantaa airport. When the alert came through, the weather conditions had quickly deteriorated, which made flying impossible. The helicopter crew left in a ground unit (a car) to pick

up the doctor, who was simultaneously riding in an ambulance from Meilahti to meet them. After the two units met, the doctor continued to Jokela in the ground unit. Having received further information on the way, he phoned the Töölö and Meilahti hospitals to inform them about the shooting.

The Central Uusimaa Rescue Department Control Room received news of the shooting by monitoring communications. At about noon, the head of the Rescue Department on call was informed about the siege both by the ERC and by the Rescue Department Control Room. The head of the Rescue Department went to the control room, and at the same time the fire chief on call, a second rescue unit, and additional ambulance units were dispatched to the scene. At this point, it was clear that at least one person had been wounded.

The Rescue Department decided to step up their level of emergency preparedness. Reserve ambulance units were deployed, and the neighbouring rescue areas of Helsinki, Eastern Uusimaa, Western Uusimaa, and Kanta-Häme were also alerted to the situation. In all, 12 ambulance units were sent to Jokela, with additional units placed in readiness in nearby areas in case more were needed.

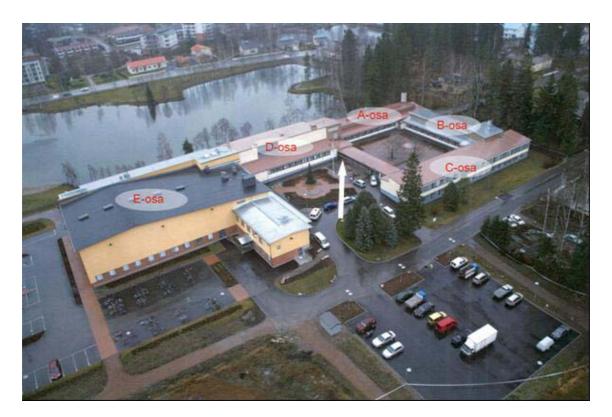
The police alerted the Volunteer Rescue Service and requested the ERC to alert the Tactical Emergency Medical Service, which they did. The Tactical Emergency Medical Service refers to the assistance provided by health-care and first-aid organisations to the police in especially demanding assignments. Tactical Emergency Medical Service personnel are trained and equipped for these assignments.

The ERC first stepped up its level of emergency preparedness when the shift leader summoned the officer on call to the control room, using an internal announcement. The announcement was heard by the social welfare and health and Rescue Services experts working in the ERC administration, who also rushed to the control room. As further information on the situation was received, the decision was made to alert the head of Communications and the director, who arrived at 11:55am and 12:03pm, respectively. Four shift leaders who had arrived for a meeting were also ordered into the control room. As the experts arriving in the control room had ERC operator experience, one of them started responding to the other incoming emergency calls while another started to perform alerting functions in accordance with the Emergency Preparedness Plan. The director assumed general command, instructed the ERC personnel to call for additional resources, and made sure that psychological after-care would be available for the operators.

1.4.2 On-site operations

Police operations

The first two police patrols alerted arrived at Jyväkuja at 11:55am, simultaneously with the first ambulance units. The patrols parked their vehicles near wing C of the building (see Picture 4). Prior to their arrival on the scene, the policemen had donned their protective equipment on Nukarintie, less than a kilometre from the site.



Picture 5. The Jokela School Centre viewed from the west. The school canteen is located in the wing in the foreground. The arrow indicates the main entrance (from police material).

While on their way, the patrols had received updated information on, for example, the gunman's movements both in the school building and outside it and on the number and location of possible victims. The ERC received numerous emergency calls, with variable information on the situation. As the policemen arrived on the scene, they did not have a description of the gunman, nor any information on his possible location in the building. Even though only one gunman had been mentioned, they had no definite information on the actual number of gunmen. Not only did they have to consider the possibility of there being more than one gunman in the building; they also had to prepare themselves for other risk factors.

In the first stage of the operation, the police aimed at getting a visual sighting of the gunman, protecting bystanders, sealing off the school building, and preventing anybody from going inside. The patrols faced groups of hysterical children and youngsters, some of whom were trying to escape through the school windows. As the windows were locked and could not be opened from the inside, the patrols helped the students get out by breaking the windows from the outside, for example. The students first were placed under cover next to the school walls, then guided away from the area via Jyväkuja.

At 12:04pm, a policeman observed a man wearing dark clothes and a shoulder bag at the main entrance, which is at the junction of wings D and A of the school building. When ordered to come out, the man asked: 'What's happened here?'. He went back inside through the door and then came back out in a few seconds. The order was

repeated. Soon after this, the man raised his gun and fired it twice at a policeman. The policeman giving orders to the gunman had taken cover behind a tree in front of the school. The distance to the main door was 45 metres, which was too far away for the policeman to fire a disabling shot. The other policemen could not see the man, who went back inside after firing the shots but soon came out again, crouching down to aim at the policeman for a moment. Then the man once again went back inside the building. At this point, the policeman radioed a description of the gunman to the other patrols.

At approximately 12:08 to 12:10pm, the first patrols to arrive at the scene continued evacuating the school building via the ground-floor windows of wing C on the Jyväkuja side. The windows had been locked from the inside, so the only way to get out was to break them.

Patrols from the Central Uusimaa and Hyvinkää police departments started arriving on the scene, as did three policemen from the Central Uusimaa Special Response Unit (SRU). By order of the field commander, these patrols started to seal off the school building. A canine patrol and eight members of the SRU arrived from the Vantaa Police Department. Led by their group leaders, all policemen arriving at the scene reported to the field commander.

Roughly between 12:05 and 12:15pm, the field commander received information from students who said that there were three or four victims lying outside the school, but they could not pinpoint their locations. As the students who provided this information came from the direction of the inner court and the policemen sealing off the building had not reported any sightings of victims, it was presumed that the victims were in the inner court. Equipped with tactical protective equipment including armoured shields, two policemen were ordered by the field commander to check the inner court. Because of the shape of the building and the numerous windows, this was a very demanding task. The gunman who had fired at the policeman and any other suspects could have been anywhere in the school building, watching the inner court through a window, for example. However, it turned out that there were no victims in the inner court. The students who had already been taken to the Crisis Centre were interviewed, and this information was relayed to the Field Command Unit.

While the preparations for checking the inner court were under way, the patrol blockading the school behind it on the pond side reported that there was a person lying outside the building in front of the wing-D entrance. With another patrol's help, the reporting patrol moved the person into cover and started basic life support (BLS). The personnel of the ambulance that was dispatched to the site continued BLS, but the victim died of his injuries on the site. The victim was later identified as the head teacher of the school centre. The police patrols operating on the pond side broke the window of a classroom and let the staff members and students out.

Reinforced with an additional policeman, the patrol that had checked the inner court next entered wing C of the school building through the nearest door. The field commander ordered them to continue evacuating the students and staff; search the building to locate any victims, as well as the gunman and any other suspects; and bring the dangerous situation to an end. Having evacuated wing C, they continued evacuation

of wing B and parts of wing A. As the assignment was dangerous, it had to be performed systematically and in accordance with established police tactics, with due regard for general safety. The assignment was slowed considerably by several factors, including the numerous corridors and several floors of the school; some doors being locked; and, of especial relevance, the gunman having free access to almost anywhere in the building and there being no certainty as to the number of perpetrators.

Readiness unit policemen arrived on the scene between 12:35 and 12:37pm. By then, an estimated 200 pupils and staff members had been evacuated from the school building. The field commander ordered some of these policemen to enter the building to locate the gunman and any other suspects. They left the Field Command Post at 12:39pm along Jyväkuja and in the inner court met a Central Uusimaa Province Police Command officer, who told them that the last sighting of the gunman was in the main corridor. The group entered the main hallway, where between wings A and B they met the two Central Uusimaa Police Department policemen mentioned above, who were carrying out the evacuation and inspection assignment ordered by the field commander.

New patrols, including readiness unit policemen, kept arriving on the scene all the time. The additional patrols were ordered to secure the cordon and to guard the Parish Centre, some 300 metres from the school, where a large number of students and staff members had gathered. The readiness unit policemen were assigned to conduct a search inside the school. Eight of them remained outside the building to perform various tasks as part of the operational and tactical police activity. For instance, an armoured carrier was employed to search for the injured, to carry evacuated persons to safety, and to provide cover for students and staff leaving the school building. The police also prepared themselves for any other threats and the use of ladders in case it became necessary to evacuate the upper floors. The police were informed of the gunman's possible identity very early on, so a unit was dispatched to inspect his home. After all, it was possible that the gunman had managed to escape the school area among the evacuees, for example.

Advancing inside the school building, the policemen had by 1:38pm discovered six people who had died of gunshot wounds, four of them in the E-wing hallway and two in front of wing D's corridor stairway. When the policemen found them, they could not feel any pulse in the victims, who were not breathing and had several gunshot wounds. The policemen also discovered several students in a classroom, who were told to stay there with policemen guarding them from outside the door.

At 1:54pm, the policemen inside the building found the suspected gunman and a pistol in a men's lavatory near the canteen. The gunman was found to be showing signs of life, and he was moved outside to receive first aid.

At 1:58pm, the policemen discovered another victim, in the corridor on the top floor of wing E. This was the last victim to be found in the school building. The policemen thought they could detect signs of life in the victim, and he was quickly moved outside to receive first aid. These signs of life turned out to have been illusory, however; outside, the doctor had no alternative but to pronounce the victim dead.

By 2:29pm, the whole school building had been cleared once. A second inspection was initiated to make sure there had been only one gunman and that all victims, as well as students and staff in the building, had been discovered. The second inspection round, in which nothing significant was discovered, was completed at 3:40pm. The last students had been evacuated by 3:17pm.

The readiness unit left Jokela at 4–4:30pm, and the National Bureau of Investigation forensic and other investigators, and later a victim identification unit, arrived at the site. The policemen on the site were gradually relieved by other personnel – from the Espoo Police Department, for instance.

The Armed Forces provided assistance to the police, first in the form of two armoured vehicles and a little later via a military unit to seal off the area for the investigation. The military unit was accommodated at the Jokela Fire Station.

Rescue operations and Emergency Medical Services

Having arrived at the scene at approximately 11:55am, a member of the ambulance crew from Järvenpää assumed the duties of the medical chief and, on the basis of updated information about the situation, requested the ERC to dispatch more ambulances to the site. Three more ambulances were alerted. Having heard the radio messages, a fourth crew joined the assignment on their own initiative.

There was total chaos at the school as the first units arrived there. A crowd of about a hundred children and youngsters ran to meet them, telling them that somebody was shooting in the school. The rescue unit took the children and youngsters to the Parish Centre, where the personnel started to separate injured from non-injured. In this they were assisted by the ambulance unit from Järvenpää.

There were about a dozen students with cuts to their bodies and sprained limbs, as well as one who had apparently been hit in the toe by a bullet. The rescue units constantly encountered dozens of students and teachers as they approached the school. The police instructed the ambulance units to withdraw along Jyväkuja to a little further from the school. The police set up the Field Command Post in the same location. The ambulance crews and rescue personnel soon became organised and started receiving the evacuees.

The firemen were first assigned to evacuee reception. In the initial stages, the plan was to bring the evacuees to the Jokela Fire Station, but very early on it was decided to evacuate them to the Jokela Parish Centre and Perttu School instead. Assisted by two ambulance units, a Rescue Department unit was in charge of receiving the injured in the Parish Centre. Another rescue unit was receiving non-injured students and teachers at Perttu School, likewise assisted by ambulance units. Other rescue and Emergency Medical Services personnel searched the surroundings and guided students to shelter. As soon as the scope of the incident had become clear, the fire chief on call left for the site, followed by a command centre unit at 12:35pm. The unit was reinforced with three officers who happened to be in Pornainen and two technical support technicians.

A doctor arrived on the scene at 12:18pm, just as the police located the first victim found to be dead of gunshot wounds. Having received a situation report from the police

field commander and the paramedic who had been functioning as medical chief, the doctor assumed the duties of medical chief and issued a National Emergency Alert. Students who were uninjured or had received only superficial wounds kept pouring out of the building and were taken to safety and to receive treatment for their wounds, if necessary.

The search for other victims commenced at 1:55pm. The perpetrator, who was still alive at this point, was put in an ambulance at 2:06pm and taken to Töölö Hospital, where he died the same night at 10:14pm. The whole school building had been cleared of students and staff at 3:17pm, and the operation was officially terminated at 3:40pm.

According to the ERC Emergency Report, in total, 12 ambulances, two rescue units, the fire chief on call, and a medical helicopter were sent to the site. The Rescue Department also alerted a command centre unit

Communications

The Public Safety Network (VIRVE) with its standard internal and co-operation call groups was the authorities' primary means of communication during the crisis.

Several operators were involved in the situation, and police communications activity in particular was exceptionally high. The overload caused delays in communications, and one access point malfunctioned occasionally. To improve communications, the network administrator had to reboot at least one of the radio units at the access point. As the police were in charge of the whole operation, this was performed in consultation with the police representative of the VIRVE service.

According to the police field commander, the handheld transceivers in the field command vehicle did not perform as required and, as a result, some of the police transceivers had to be restarted. Apparently the problem was due to the rebooting of the access point radio unit, so the somewhat time-consuming process of restarting the handheld transceivers was probably not necessary. The Emergency Medical Services also reported occasional problems in communications.

Several co-operation call groups have been designed and implemented in the VIRVE network. All of the general call groups were used in the operation, as were groups between the police and the rescue services and the police and ambulance services. The Emergency Medical Services leaders reported that communications with the police were defective. This improved, however, when Tactical Emergency Medical Services personnel arrived on the scene. These personnel did have VIRVE handheld transceivers and police call groups at their disposal, but still the Tactical Emergency Medical Services team leader was provided with an additional transceiver by the police. By using two radios, the team leader was able to listen to police communications and talk to his own team simultaneously. The Tactical Emergency Medical Services team leader informed the Emergency Medical Services of, for instance, the possible number of patients, but, on the whole, little information was available during the operation. The Emergency Medical Services, the Tactical Emergency Medical Services, and the rescue

unit were all physically close to the Police Field Command Centre, so at times they were also able to communicate directly during the operation.

In addition to the VIRVE network transceivers, some mobile phones were utilised, but their use was hindered by network overload, as many bystanders, students, reporters, and authorities were using mobile phones in the area.

Operational Command

Since the incident involved firearms, it was the police who had operational command. The Police Field Command was located on Jyväkuja, some 100 metres from the school building. The field commander, who was the first to arrive on the scene, informed the situation commander, and from him the information flowed upwards through the chain of command. At 12:20pm, a police lieutenant from the Hyvinkää Police Department arrived on the scene and, having acquainted himself with the situation, assumed field command. Some 20 minutes later, field command was assumed by a police lieutenant from the Helsinki-Vantaa airport, who, in addition to his other duties, maintained an operation log. At 1:40pm, field command was assumed by a police lieutenant from the Central Uusimaa Police Department who had arrived at the site. Field Command left the scene at around 10pm. The changes in field command during the incident were in accordance with the Emergency Preparedness Plan of the police, which is aimed at securing a level of command with sufficient authority and resources to function in a national emergency. Each new field commander always had up-to-date information on the situation available as the previous field commander remained on the scene to provide support for him.

As for the Rescue Department, at 12:42pm the chief on call made the decision to set up a Rescue Department command centre (RDCC) in the Rescue Department building in Vantaa. He also ordered the fire chief on call to set up an operational area command (OAC) in Jokela, which was to receive its instructions from Police Field Command. On their own initiative, the Rescue Department set up a command centre to provide operational support.

The Rescue Department Command Centre reported to the State Provincial Office and the Ministry of the Interior and arranged a bus for patient transport. Class-C and class-D ambulance assignments had been discontinued as soon as the crisis arose. The RDCC also relayed to the police information provided by Tuusula Municipality on the people inside the building and communicated with the police via the Vantaa Police Department as well. At 1:12pm, the OAC received word that Police General Command had been set up at the Järvenpää Police Department. At 1:13pm, the Mediheli doctor arrived at the OAC with information from medical personnel.

The RDCC log states that at 1:38pm a bus took 10 patients to Hyvinkää Hospital. The RDCC ordered a food service point to be established at the site t 1:50pm and at 3:24 received a report confirming that there was food available for 160 people at Perttu School.

The RDCC received definite information on the victims at 2:32pm: eight dead, one requiring urgent care, and four non-urgent cases.

Rescue and medical activities were discontinued at 3:40pm. Before the RDCC discontinued its operations at 4:10pm, a debriefing to be held between 5 and 7pm was held for all personnel. After the debriefing, the personnel who took part in operations in Jokela were relieved by overtime personnel.

Police, Rescue Services, and Emergency Medical Services media liaison work

In the early stages of the incident, liaison work with the media was the duty of the Central Uusimaa Police Department's head of investigation, who initially also doubled as head of criminal investigation. He was off duty when events started to unfold but returned to work as soon as he heard about the incident. He was assisted by a police sergeant with first-hand knowledge of daily media liaison duties. The first bulletin, entitled 'Shooting Incident at Jokela School', was released at 12:45pm, approximately an hour after the first ERC emergency call and about 45 minutes after the arrival of the first police patrols on the scene. It contained a brief description of what had happened, the police siege, and the set-up and location of the Crisis Centre. It also provided information on further bulletins.

At 1:10pm, a bulletin with a hotline number for the victims' relatives was released. The media were also informed that the National Bureau of Investigation had taken over the investigation. A third bulletin was released at 1:50pm, with the purpose of informing the general public of the Finnish Red Cross national emergency phone hotline.

Responsibility for the investigation and media liaison duties was transferred to the National Bureau of Investigation, whose representatives arrived on the scene at 2:00pm. They were given a situation overview by the Central Uusimaa Police Department media liaison officer. Between 2 and 4pm, the media were informed of an international press conference to be held later on. The aim was to provide the media with a picture of the situation, to prevent dissemination of incorrect information, to inform all media equally, and to allow the investigators to work in peace without interference from the media or the public. The police answered media representatives' enquiries when they could and as the information concerning the incident was updated. The media were provided with information on, for example, the transfer of responsibility for the investigation, contact information for the personnel in charge, and the time and venue for the press conference. A preliminary situation report or 'first bulletin', entitled 'School Shooting in Jokela, Tuusula', for the general public was released by the National Bureau of Investigation at 4:00pm in Finnish and in the country's second official language, Swedish. The bulletin contained information on the transfer of responsibility for the investigation to the National Bureau of Investigation, the names of the general chief of investigation and chief of investigation, and a phone tip line number for the general public. It was also announced that the press conference would be held at Tuusula Municipal Hall at 6pm and that no information would be available for the media prior to that.

Around 2:50pm, the health authorities were preparing for a press conference in Meilahti Hospital and consulted the police. It was then agreed that informing the media of casualties would be left for the police, who would later hold a press conference at Tuusula Municipal Hall. At 3:00pm, the health authorities held their press conference, which provided the media with a description of the incident from the health authorities' and patients' point of view. Here, the health authorities were represented by the medical chief and Meilahti Hospital's Preparedness Plan officer and director of surgery. At the time of the press conference, the Emergency Medical Services had already informed the authorities that there were eight casualties. However, at this point, the official figures were given as two dead; one wounded, at Töölö Hospital; and 10 with minor injuries, at Hyvinkää Hospital.

The police press conference was originally scheduled for 5pm. However, it was rescheduled for 6pm, as the police decided that they did not at that point have sufficient information on matters such as the casualties. Another factor in the rescheduling was that, at that point, the police were giving a situation report to the Cabinet. In the press conference at 6pm, the media were provided with details on the number and sex of the casualties, provided with a general description of the incident, and informed of the criminal investigation to be launched. Apart from police representatives, the authorities were represented by the rescue director of the Central Uusimaa Rescue Department, a senior physician with tactical emergency service training, and the chief on call of the Rescue Department. All statements were made by the police, and none were issued by the other representatives. Simultaneously with the press conference, the police issued a press release in Finnish, Swedish, and English.

While the incident was still in progress, the Rescue Department offered to assist Police Field Command in media liaison work, as they already had a suitable command unit at the site. The Rescue Department Command Centre was also equipped to relay information to the media on the venue for the press conference, for instance. There was no active co-operation between the police and the Rescue Services in media liaison work.

At 9am the next day (Thursday, 8th November 2007), the police issued a press release stating that there would be a media conference at 3pm at the National Bureau of Investigation Headquarters, in Vantaa. The press release contained updated information on the investigation and a review of the operation as outlined at the press conference the previous evening. The aim in the media work was also to correct erroneous media information, such as false rumours and conclusions drawn on the basis of them. The press conference at 3pm provided another review of the operation, including field operations, medical information, and the current results of the technical investigation. The date and time of the next press conference were announced as well. On Friday, 9 November 2007, a press release provided a situation report. From then on, starting on 10th November 2007, press releases were issued as the need arose.

The criminal investigation was completed in April 2008, and the National Bureau of Investigation held a press conference on it at their headquarters on 17 April 2008. Copies of the public sections of the Criminal Investigation Report were handed out to the media. The victims' relatives were appalled to find out that the public criminal

investigation material, as presented to them beforehand, included pictures of the victims. These were, however, omitted from the criminal investigation material released to the general public.

Activities at medical institutions

In accordance with standard procedure, Hyvinkää and Töölö hospitals were alerted by the ERC – at 12:01 and 12:05pm, respectively. The ERC also alerted the Helsinki University Central Hospital (HUCH) Primary Care Unit of the Hospital District of Helsinki and Uusimaa. Töölö Hospital, in turn, alerted Meilahti Hospital, the Hospital for Children and Adolescents, and Vantaa's Peijas Hospital. In the early stages, the hospitals were informed of one person being dead and four patients in care.

On the basis of this, HUCH stepped up their level of emergency preparedness in accordance with the National Emergency Preparedness Plan and set up a command centre at the Meilahti Hospital Department of Surgery office. No extra personnel were alerted, but the personnel were told not to leave their work stations unless specifically instructed to do so. The Specialised Medical Care Department managed to step up their level of preparedness significantly – by 1pm, for example, 15 operating theatres were available for emergency operations. The paramedics were instructed to take patients with gunshot wounds to the head or limbs primarily to Töölö Hospital and those with gunshot wounds to the body to Meilahti Hospital. The Hospital for Children and Adolescents and both the Peijas and Hyvinkää hospital were also prepared to receive patients. The Hospital for Children and Adolescents prepared to send paediatric surgeons and other personnel to help at other hospitals.

During the incident, the medical chief in the Command Centre at Meilahti Hospital contacted the Mediheli doctor on the scene, who provided him and the hospital with reliable information on the situation.

At 2:10pm, the Command Centre first received word of a young male patient with a serious gunshot wound to the head being transported to Töölö Hospital. He arrived there at 2:45pm and died at 10:14pm. The patient in question was the perpetrator, who had shot himself in the head.

Of the students, 10 were taken to Hyvinkää Hospital and two to Järvenpää Health Centre. No-one else required medical care.

All units returned to normal operations by 3:30pm but continued to issue situation reports and press releases as the need arose.

Tuusula Municipality media liaison work

Tuusula Municipal Hall, in Hyrylä, was first informed of the shooting incident at around noon, and members of the Municipal Management Group immediately gathered to discuss the measures to be taken. The municipal manager was not present then but could be reached by phone. A three-member team consisting of the municipal PR officer, a strategy planner, and the management assistant was formed to handle interaction with the media. The team started to draw up the first bulletin.

The municipal manager, the head of the General Education Department, and the director of Health Services went to the Crisis Centre in Jokela, where they were briefed on the situation by the police. The municipal liaison officer responsible for contacts with the authorities drove to the Police Command Centre in Järvenpää, which improved the municipal authorities' communications significantly. Members of the Municipal Executive Board also communicated with the Media Liaison Team and issued statements for the media.

A crisis communications tool had been added to the municipal Internet site the previous spring and was now put to use. The first bulletin appeared on the site at 12:50pm and was subsequently sent to the media by e-mail at 1pm. Initially the bulletin stated that one person had been shot, but this was changed at 1:25pm to indicate four shot and one dead.

The municipal authorities were 'snowed under' with media enquiries from both Finland and abroad. Interviews were given by the municipal manager and the head of the General Education Department. The three-member Media Liaison Team were responsible for work with foreign media.

At around 3pm, the municipal manager returned from Jokela to Tuusula Municipal Hall. By now it was known that there were several casualties and that the perpetrator had tried to kill himself. As it was the police who were in charge of informing the media of the number of victims, no mention of this could be made in municipal bulletins. The number of victims was confirmed by the police in the press conference at Tuusula Municipal Hall at 6pm.

In the evening, the municipal authorities provided the media, municipal officials, the school's students, parents, and operations personnel with updated information on the day's events. Furthermore, information was provided on crisis services; closing of schools; a minute's silence; flying of the flag at half-mast; a memorial service to be organised by the parish; and, later in the evening, the perpetrator's death in hospital.

In the days that followed, the municipal authorities continued to monitor the situation, issued press releases, and made the decision not to make public where and when the students and staff would meet. It was also decided not to provide the media with photographs of staff or students. A week later, the municipal authorities issued a letter to 32 editors-in-chief, signed by the municipal manager and vicar, in which they expressed their wish for the media to leave the municipality in peace to allow them to bid their last farewell to the victims. The media complied with their wish.

The Ministry of Education and the National Board of Education's response

The Ministry of Education was first informed of the incident on 7 November 2007 at 12:30pm, through the Finnish News Agency (STT). Work was immediately started to form a complete picture of the situation and provide the minister with background information. The National Board of Education was informed, and the two authorities made sure they shared the same overall view of the situation. The Board of Education also provided the ministry with a report on the steps taken in connection with the

situation. The preparedness organisations of both authorities were alerted, and those in charge communicated with each other. The Ministry of Education immediately instructed the National Board of Education Internet site administrator to publish crisis material to aid in dealing with the situation both in schools and at home.

Initially the material published was an updated version of that produced in connection with the tsunami disaster in Asia and also Finland's worst-ever road accident, in Konginkangas, both in 2004. The aim was to provide schools with support in facing the crisis; to help student welfare authorities in their work; to aid schools in dealing with the emotional fallout; and to meet the emotional needs of students, teachers, head teachers, and parents in their initial shock and distress. More support material, centring on several themes, was provided in the following days, and this was also translated into Swedish.

On the night of the incident, the National Board of Education expressed their condolences on their Web site, along with directions for how to deal with the crisis in schools and other educational institutions. On the next day, seven separate sets of guidelines were published on the site, three of which dealt with discussion of the incident in classrooms, the role of the home in the crisis, and the setting up of crisis teams in schools. The rest of the guidelines comprised background information on crises; general instructions for schools; instructions for head teachers; and a bulletin entitled 'Children, Adolescents, and the Events at Jokela School', produced jointly by the National Board of Education and the Ministry of Social Affairs and Health. In addition, on the morning of Thursday, 8 November 2007, the National Board of Education e-mailed additional support material to all schools, which covered, for instance, how to deal with the crisis in morning assembly.

Over the next few days, the National Board of Education published instructions for use in the event of bomb threats, on identifying the need for support in children and adolescents, and on violent behaviour. Furthermore, all schools received instructions for drawing up and maintaining a rescue plan, as well as on how to keep the staff informed of it. The schools were also reminded of the need to perform regular rescue drills and that any illegal threats against the school were to be reported to the police.

The page that received the most hits on the National Board of Education's Web site was 'Support for Schools and Homes in a Crisis Situation', followed by 'The Events in Jokela Shock the Whole School Community'.

1.5 Psychosocial support

Crisis support was provided by Tuusula Municipality's Social Work Services, Health Service, and Youth Work Services; Tuusula Parish; the Finnish Red Cross (FRC) Voluntary Rescue Service; the SOS Vehicle of the Finnish Society for Mental Health; the Hyvinkää Society for Mental Health Crisis Centre; the Vantaa Crisis Centre; and numerous parish workers with after-care training. The support provided was in the form of individualised crisis support and peer support groups for students, staff, their families, and anyone else in need of support.

The Finnish Red Cross Voluntary Rescue Service

The Voluntary Rescue Service was alerted via the FRC by the police on 7 November 2007 at 11:55am, when they were informed of a shooting incident at a school in Jokela. The Helsinki-Uusimaa District of the FRC alerted their volunteers, and at 12:10pm it was decided to send the Red Cross bus to the scene. The FRC Central Uusimaa Emergency Response Unit left for Jokela immediately upon receipt of the alert.

At the Jokela Parish Centre, the Voluntary Rescue Service activities were led by the FRC Uusimaa District chief of operations. Volunteer activities were co-ordinated by another chief of operations at FRC Headquarters.

At the crisis centre set up in the Jokela Parish Centre, Voluntary Rescue Service duties included traffic control, compilation of a list of evacuees, provision of food service for rescue workers, and psychological and emotional support for those involved in the incident. There were two Voluntary Rescue Service teams, made up of 38 volunteers each, carrying out these tasks at the Jokela Crisis Centre.

The FRC Preparedness and Response Unit's psychologists provided support for the Jokela School Centre staff and the victims' families. In total, seven professionally facilitated peer support sessions were conducted for the staff.

Psychological support provided by the Church

A diaconal work unit from Tuusula Parish participated in setting up the Jokela Crisis Centre and served as a liaison with the parishes in and around Helsinki and in several neighbouring municipalities to provide additional workers for the Crisis Centre's operations.

At the Crisis Centre, the work of the diaconal team consisted mainly of providing psychological and emotional support.

The Crisis Centre was open around the clock from the afternoon of the day of the incident (Wednesday) until 6pm on Sunday. All told, seven pastors from Tuusula Parish, seven diaconal team workers, and five youth workers worked at the Crisis Centre. In addition, there were two diaconal workers and a youth worker from Kerava Parish, five parish workers from Järvenpää Parish, one from Pornainen Parish, one from the Family Counselling Centre, and six psychological support workers each from Vantaa and Espoo parishes. In total, 103 Church workers were involved in the Crisis Centre at the Jokela Parish Centre, providing after-care, or performing crisis work in schools. Additionally, some churches in Tuusula and neighbouring municipalities kept their doors open longer than usual during the aftermath of the crisis.

The Vantaa Crisis Centre (currently the Vantaa Social and Crisis Emergency Centre)

The Vantaa Crisis Centre had made an arrangement with other authorities and the ERC whereby in a situation requiring urgent social or crisis support in any of the neighbouring municipalities, the ERC would also alert the Vantaa Crisis Centre. In

keeping with this arrangement, the Vantaa Crisis Centre was alerted at 12:15 and informed of a shooting incident at the Jokela School Centre. At this point, the ERC's preliminary estimate of casualties was 3–4. According to the ERC alert, the school was under siege by the police, the situation was extremely chaotic, and the students and staff were in a state of shock. The Crisis Centre immediately alerted the director, who stated that he would try to get more information on the situation and determine the kind of action the Crisis Centre should take. He also alerted the director for Social and Medical Emergency Preparedness and Response in the Ministry of Social Affairs and Health and the chief of Vantaa Psychosocial Services.

The director for Social and Medical Emergency Preparedness and Response asked the Vantaa Crisis Centre director to offer help to Tuusula Municipality in organising acute crisis assistance. It was agreed that the chief of Psychosocial Services would go to Jokela to arrange the establishment of the Crisis Centre and to co-ordinate the necessary crisis assistance. The director of the Crisis Centre started to make phone calls to round up the necessary crisis workers for Jokela.

The chief of Vantaa Psychosocial Services arrived at the Crisis Centre in the Jokela Parish Centre at approximately 2:30pm. He reported to the police officer in charge, and the two agreed that the Vantaa Crisis Centre would assume command on the scene. The Crisis Centre remained under the command of the Vantaa Crisis Centre until it was officially disbanded on Sunday, 11 November 2007, at 6pm. Each day, hundreds of people arrived in the Crisis Centre to spend a quiet moment or to talk to the workers.

The Crisis Centre also co-ordinated response to the need for crisis assistance and managed the available crisis work resources. On Thursday, 8th November 2007, the Crisis Centre Management Team decided that all requests for crisis support would be relayed to the Tuusula Municipality senior physician in charge of children's and adolescents' special services and that the director of the Vantaa Crisis Centre would organise the necessary crisis workers. In addition to providing crisis support, the Crisis Centre organised information sessions for the families of the students and arranged daily prayer meetings.

The Tuusula Municipality Social Services Emergency Unit

The Tuusula Municipality Social Services organisation includes an emergency unit with two leaders and four other members. In accordance with the alert flowchart, they were alerted by the director of Social Services.

The Social Services Emergency Unit arrived in Jokela quite soon, before 1pm. At that point, the police were in charge of the activities in the Crisis Centre and ordered the Emergency Unit members and the Voluntary Rescue Service to maintain a list of the people entering and leaving the Crisis Centre.

Tuusula Municipality Youth Work Services

Two Tuusula Municipality Youth Work Services workers were involved in the work at the Crisis Centre, and the Jokela Community Centre employees kept the doors of the Community Centre open. The Crisis Centre in the Parish Centre provided the actual crisis support, whereas the Jokela Community Centre was primarily meant for young people living in Jokela.

On the morning following the incident, the director of Youth Work Services held an informational session at the Jokela Community Centre, co-ordinating the workers' activities and outlining the steps to be taken. Allianssi, a Finnish youth co-operation organisation, offered assistance, which was gratefully accepted, as the need for workers who could come to Jokela for the coming weekend was especially pressing. The Community Centre kept its doors open around the clock until Sunday evening, 11 November 2007.

Allianssi and the director of Youth Work Services managed to assemble a team of youth workers from several municipalities. They worked in eight-hour shifts with an hourlong work counselling and debriefing session after each shift. This ensured that each worker received the necessary psychological support for the work.

Other professionals were present in the Community Centre, requested to arrive there by Tuusula Municipality Youth Work Services and other authorities. This group included, for example, crisis workers, Social and Child Welfare Services workers, and school psychologists. All were given work shifts between Thursday and Sunday. On Friday night, also volunteers from Tuusula and Vantaa were working in and around the Community Centre.

The same evening, 9 November 2007, a member of the Ministry of Education Youth Policy Division visited the Community Centre, which allowed the authorities on the scene to make the need for continued support known to the ministry.

Co-operation between school and parents

Co-operation between the school and parents was initiated on the day following the incident, with people discussing the events, sharing experiences, and comforting one another. Along with some students and parents, the teachers gathered in the Crisis Centre. The first public discussion of the events was held in the Jokela School Centre two weeks after the incident. This was open to all Jokela residents.

Save the Children Crisis Chat

In connection with the incident, Save the Children Finland started two Crisis Chat sessions on the Internet, in which young people could discuss the events with each other and with volunteer support personnel. The Crisis Chat was open on five nights between 6 and 9pm, and many youngsters participated. Some had been involved in the events in one way or another, while others were shocked young people living elsewhere in Finland. Save the Children Finland was well prepared to organise a Crisis Chat, as there had been one every year at Christmastime since 2003 as well as for the tsunami disaster in Asia and after Finland's worst-ever road accident, in Konginkangas, in 2004.

Psychological support for police, Rescue Services, and Emergency Medical Services personnel

A debriefing session at the Central Uusimaa Police Department was organised for the policemen on the scene after they had been relieved. Also, a debriefing session at the Rescue Centre was held for Rescue Department personnel, from 5 to 7pm on the day of the incident, after which the personnel went off duty. The Rescue Department debriefings were attended by private ambulance crews as well, and other Emergency Medical Services personnel. The ERC personnel also participated in a debriefing session at 5pm on the day of the incident.

Psychosocial support in the following months and years

An after-care co-ordination team with two psychologists specialising in crisis work, a crisis worker, and two assistants was set up in Jokela. The aim in Tuusula Municipality after-care has been to provide support for existing structures – i.e., support for teachers at the school centre; psychological support for students and staff; and additional personnel for school services, youth services, health services, and school centre student welfare. However, while the need for after-care remained urgent, it turned out to be difficult to find the additional personnel and education welfare officers needed.

The temporary solutions at the school centre were brought to an end in March 2008 when a new head teacher was elected. Since then, the focus at the school centre has been increasingly on normalisation. Immediately after the incident, substitutes were hired for teachers as need arose and by the end of the 2008 spring term, a total of 28 substitutes had been hired, for periods of varying length. In addition, five new special-needs assistants, a special-needs teacher, and a guidance counsellor were hired.

During the normalisation period, an effort was made to separate teaching from student welfare. The school psychologists and psychiatric nurse relocated to new facilities, outside the school, in April 2008. The urgent need for support is well illustrated by the fact that in the first two weeks of March and April the school psychologists, psychiatrist, and psychiatric nurse had a total of 268 appointments or consultations.

Jointly with the Finnish Red Cross, Tuusula Municipality arranged a peer support weekend for the victims' families and friends in April 2008. However, the number of participants was only half of what had been anticipated. It was decided to organise a total of three peer support weekends, with the second held approximately a year after the incident and the third scheduled for late winter 2009. The weekends have been well liked by the participants.

In early 2008, Tuusula Parish organised a group for grieving families and relatives, some of whom were also provided with support by their employers. The school centre's Student Welfare Team received additional resources and has played an active role in provision of support for the victims' siblings. Still, not everybody felt a need for support; some wanted to get on with their lives on their own. Some of the families and relatives felt the psychosocial support to be sufficient, while others found it too diffuse; not focused on the victims' families; and, because of the large number of organisations involved and in some cases also municipal borders, in many ways defective. More

support would have been required for handling judicial and practical issues related to, for example, estate inventories and compensation. The perpetrator's family have also received expert help and support.

The office hours of the school doctor have been extended, though, at the same time, his workload has been reduced on account of the services offered by psychologists, the education welfare officer, and a child and adolescent psychiatrist. The school staff and municipal employees are supported through Occupational Health Services. In view of the other support measures available, few psychotherapy sessions had been held by the end of April 2008. With hindsight, it can be observed that the focus should have been more on child and adolescent psychology or psychiatry than on crisis psychology.

In the experience of the educational welfare officer, the youngsters in Jokela are cooperative and open. Many of them display signs of post-traumatic stress and anxiety, but the symptoms vary in nature and do not necessarily occur simultaneously. Some people suffer from insomnia, restlessness, and increased use of intoxicants. In some cases, normal everyday things may trigger unusually strong emotions and reactions. Even more than a year after the incident, some students found it difficult to enter the school building and study there. Some still had to be escorted to school by youth and social workers. Some students in their final year expressed a desire to sit their spring 2009 matriculation examination somewhere else.

The parents have received a lot of special attention at Parents' Night events, for instance. They have also been actively in contact with the school and tutors. Peer support groups have been organised for the parents since May 2008. An orientation visit to the school centre was arranged for the parents of the students who were to start the upper level of comprehensive school in autumn 2008. A National Bureau of Investigation lieutenant was also present to answer the parents' questions.

The youth services have contributed to after-care in various ways – for instance, by arranging various events, providing support for individual youngsters, and keeping the Jokela Community Centre doors open every day, for a total of 42 hours weekly. The number of daily visitors has been high: on some days, as great as 80. The youth services have reported an increase in the use of intoxicants.

Several groups, among them the Occupational Health Service doctors who come face to face with the school staff on a daily basis, the youth workers supporting the students, and the social workers helping the victims' families, have expressed a wish to have been offered a chance to consult crisis experts provided by the Ministry of Social Affairs and Health in those cases where they felt out of their professional depth. As it was, the role of the crisis experts was less active, and they mostly carried out After-care Team assignments.

Afterwards it was discovered that those municipal employees who were directly involved in providing support for the victims' families as well as the students and staff suffered from fatigue and exhaustion due to being exposed to so much grief and anxiety for such a prolonged period. This resulted in increased sick leave and in some cases

even people finding another job. There should have been a concrete programme to prevent vicarious trauma and exhaustion right from the beginning of after-care.

After the Kauhajoki school shooting, in September 2008, many Jokela residents told the authorities that in their opinion after-care had focused too much on the individuals in need of therapy. This view was shared by the professionals who worked in Jokela, who felt that it was necessary to encourage the tight-knit Jokela community to deal with and recover from the trauma as a community. The first anniversary of the incident was an event with a strongly communal spirit where the collective grief of Jokela residents was manifest in the 3,000 candles that were lit around the pond next to the school.

The National Public Health Institute (now the National Institute for Health and Welfare) carried out a survey on how well the Jokela School Centre students have recovered from the traumatic events of the shooting incident and on the support and care they received. According to the results of the survey as published in late 2008, family and friends were considered the most important source of support for the youngsters. The survey also shows that two thirds of the school centre students are doing well but one third have been suffering from psychological symptoms. In the control group, from another school, only 12 per cent had suffered such symptoms. Almost half the girls and approximately a quarter of the boys who participated in the survey were found to have an increased risk of succumbing to post-traumatic stress disorder. The follow-up survey will continue at least until 2010.

1.6 Identifying the victims, informing the families, and investigating gunshot wounds

Identifying the victims

At approximately 1pm on 7 November 2007, after responsibility for the investigation had been transferred to the National Bureau of Investigation (NBI), the situation commander appointed an officer in charge of identifying the victims. It was decided that Interpol (the international criminal police organisation) victim identification procedure as described in the Interpol Victim Identification Guide would be utilised in the identification. The officer in charge formed a 10-member team of NBI investigators, who began preparations to leave for Jokela. The team consisted mainly of investigators with experience in victim identification.

The police field commander authorised the forensic investigators to start their crimescene investigation in the school centre at 3:40pm. The operation also included victim investigation and preliminary identification on the basis of the papers found on the victims. It was, however, decided not to move the victims before the arrival of the forensic pathologist and the identification team proper.

The number and sex of the victims were conclusively established at the scene of the crimes at 5:40pm. This information was made public in the press conference at 6pm.

The NBI Victim Identification Team arrived at the Jokela School Centre at approximately 5:30pm. A team of five forensic pathologists from the Helsinki

University Department of Forensic Medicine had arrived moments earlier. Before the investigation was launched, a meeting was held on the site to establish who would participate in the investigation and to reach an agreement on procedures and the various tasks to be performed.

Before the arrival of the identification team, Emergency Medical Services personnel had already labelled all eight victims with black tags in accordance with triage classification. Six of the victims were located a few metres from each other in the ground-floor hallway, near the coat racks. The two victims found outside the school building had already been moved for resuscitation.

The external inspection and preliminary identification were conducted in four groups, with two forensic investigators and a forensic pathologist in each. The external inspection also included measuring the victims' body temperature for a preliminary estimate of time of death. The victims were photographed before they were moved, and their positions were established with precision, for a crime scene drawing to be produced later.

The external inspection, preliminary identification, and determination of time of death were completed by 8:30pm, after which two hearses transported the victims to the Helsinki University Department of Forensic Medicine. After this, the forensic investigators continued their investigation of the crime scene.

A more detailed examination of the victims was started immediately at the Department of Forensic Medicine. The examination included documentation of the victims' gunshot wounds. Acquisition of the victims' ante-mortem data necessary for the identification had been started earlier; the most important of the data was the victims' dental records, which the investigators managed to acquire that very night. The students' records were provided by the Tuusula Dental Clinic.

On the basis of the dental records, the forensic dentists were able to positively identify all victims that evening and night. The official identification took place in an identification meeting at the NBI on 14 November 2007, chaired by the NBI Criminal Police chief superintendent. The other participants were a Criminal Police lieutenant and two professors from the Department of Forensic Medicine. All of the identifications were declared official.

Informing the families

In national emergencies, the National Bureau of Investigation employs an emergency family contact person system as part of their preparedness plan. A contact person is appointed for each victim's family, to help and support them personally in the crisis. In recent times, this system was successfully employed for the 2004 tsunami disaster and the helicopter accident in Tallinn in 2005. The system was employed once again in Jokela. The criminal investigation situation commander appointed an experienced NBI policeman as the contact person. He was assisted in his task by a pastor who had had similar assignments earlier.

Around 6pm, there were enough personal data from the preliminary identification of the victims for a search to begin in the National Population Register for the names and contact information of the families. In early evening, two victims' families were informed of the demise of their loved one. At around 10pm, the families of three victims came to the Department of Forensic Medicine to identify their loved one. Soon after this, other victims were positively identified and their families located. The family contact person and the pastor went to Jokela to deliver the sad news to families who had not yet been informed. In one case, they confirmed the preliminary information the family had received earlier. The first of these families was visited at twenty minutes past midnight and the last at 3:05am Before visiting the families, the policeman and the pastor rang them to let them know they were coming. In a situation of this nature, the bearer of sad news always visits the family in person.

The contact person leaves his or her contact details with the family and, in the following weeks and months, helps them in any way possible by visiting or calling them regularly to provide support and to answer any questions they might have.

The perpetrator's parents were informed of the situation and their son's involvement in it while the incident was still in progress. Later that day, the police informed the parents of their son being transported to hospital and eventually of his demise. They also received the necessary support as outlined in the Emergency Family Contact Person System.

During the afternoon and evening, the victims' families placed numerous calls to the hospitals mentioned in the media. They also endeavoured to get more information on their loved ones from the Crisis Centre at the Jokela Parish Centre. They felt they were not paid enough attention and information was unnecessarily withheld from them though their loved one was missing. They found the situation agonising, as they did not know what to do. They were, however, satisfied with the contact person system.

Forensic post-mortem examinations

A complete forensic post-mortem examination was performed on all of the victims at the Department of Forensic Medicine between 9 and 13 November 2007. Each victim was examined by the same pathologist who had carried out the preliminary external inspection of the victim at the Jokela School Centre.

The results of the examinations revealed that all of the victims had died instantly and nothing could have been done to save them. The perpetrator was still alive when he was discovered, but the examination revealed that his wound was extremely serious and there would have been no chance of saving his life even if first aid had been available immediately after he shot himself.

1.7 Damages

1.7.1 Personal injury and damage to property

The perpetrator's included, nine lives were lost in the incident, and 13 people were injured. One person received a gunshot wound to the foot, but the other injuries consisted mainly of sprained ankles and cuts received while escaping through a window. According to standard investigation procedure, the injured were divided into two groups; one person had severe injuries, and 12 had mild injuries. Most of the injured students were in upper secondary school as opposed to comprehensive school.

The amount of mental harm was considerable, and it will burden the victims' families, the Jokela School Centre, and the whole Jokela community for many years to come. The need for psychosocial support has been widely recognised, and several authorities have already provided funds for this purpose.

Damage to the school building amounted to a total of €43,000. Despite his efforts, the perpetrator did not succeed in setting the building on fire, so there was no fire, smoke, or water damage involved. However, considerable costs were incurred by various authorities because of the extra work caused by the incident.

Costs of psychosocial support

Tuusula Municipality has estimated that the after-care costs caused by the shooting incident will eventually cover a period of six years and total \in 4.8 million. The psychosocial support for the community, in excess of so-called normal costs in a situation like this, amounted to \in 380,000 in total for November and December 2007 and \in 1.35 million for 2008. Of the 2008 amount, \in 950,000 was spent to hire 43 new employees for various periods to provide support for the students, teachers, Jokela residents, and Tuusula Municipality personnel. Five new youth workers were hired also. The municipality spent a total of \in 400,000 to cover the costs of specialist psychiatric care as well as therapy and work counselling for its personnel.

The estimated total cost of €4.8 million includes the Jokela-crisis-related Ministry of Education project started in Tuusula in 2008. The project aims to find new ways for students to defuse their anger and aggression instead of resorting to violence. The project is multifaceted and involves several authorities. A number of special-needs teachers and health-care personnel have been hired to work as part of the project, with the costs amounting to €600,000 for 2008. In addition to the costs mentioned above, the insurance premiums for Tuusula Municipality have risen considerably.

The Ministry of Finance provided Tuusula with $\in 1$ million of additional funding to cover the after-care costs in both 2007 and 2008. An additional $\in 240,000$ for youth work and $\in 10,000$ for burial expenses were provided by the Ministry of Education in 2007. An application for another $\in 1$ million to cover the costs of hiring 39 employees for psychosocial support in 2009 is pending approval. The estimated cost of the Ministry of Education project for 2009 is $\in 700,000$. It is estimated that in 2010

additional funding will be necessary for hiring of two new employees and for the Ministry of Education project, which is to last until 2012.

The Social Insurance Institution has earmarked €500,000 from its discretionary rehabilitation budget for therapy for the victims' families. The General Synod granted Tuusula Parish €300,000 for after-care.

In accordance with the Act on Compensation for Crime Damage, the State Treasury paid the victims and their families a total of €150,000 in damages. The victims' families were granted €40,000 for burial expenses. The remaining €110,000 has been spent mainly on compensation for temporary psychological harm and suffering for those who survived the incident.

1.7.2 School threats following the Jokela incident

The police are aware of at least 86 school threats between the Jokela and Kauhajoki school shootings, on 7 November 2007 and 23 September 2008, respectively. Of these, 34 led to criminal prosecution. Some of the threats were written on school walls or furniture, while others were made via the Internet or verbally to students or teachers, with all of them following a similar pattern.

The media also published information on school threats that had taken place. According to the media, the threats were typically inspired by the Jokela incident, which can clearly be seen in the pseudonyms, text, and videos used by those making the threats, who more often than not were boys between the ages of 14 and 16. Apparently, some of the threats spread as rumours and it was never found out where they originated.

According to the press, until February 2008 most threats had been made against upper-level comprehensive schools but upper secondary schools and vocational institutes were also targeted quite often. Instead of students, some of the threats were made against the head teacher or the school nurse. These threats were also usually made by boys aged 14 or 15, but some girls and a few upper secondary school students were also involved. According to the press, the threats were almost without exception made on a whim without the youngsters realising the seriousness of their acts.

Being threatened is always alarming for a school, and normal school work and activities easily become paralysed for some time. The threats caused fear, anxiety, insecurity, and uncertainty in schools, and many people started wondering whether what had happened in Jokela could occur at their school also. Some Jokela-inspired threats against offices or other workplaces have also come to light.

Even more school threats were made after the Kauhajoki school shooting. As late as in early 2009, they still showed no signs of decreasing.

2 BACKGROUND INFORMATION

2.1 Description of the site and the instruments of crime

2.1.1 The school building

Today the Jokela School Centre is home to both lower and upper levels of comprehensive school. Wings A and B were built in 1959. Wing D was added in 1961, and the C, or upper secondary school wing, three years later. The administrative wing was renovated in 1998, followed by extensive refurbishment and extension in 2005. By 2006, the extensions had been completed and the building was in good condition.

The total area of the one-to-three-storey building is $7,848 \text{ m}^2$. According to the suggested building specification, the ground floor area is $3,749 \text{ m}^2$, the first floor $3,225 \text{ m}^2$, and the second floor 819 m^2 . With its numerous corridors and hallways, the building is somewhat sprawling in nature. There are several entrances to the building, eight on the Jyväkuja side and three on the pond side.

2.1.2 The weapon and ammunition

As far as can be established, the perpetrator first came into contact with guns when visiting the indoor shooting range of a Helsinki-based shooting club in August 2007, where he was allowed to fire a gun himself. He joined the club on 31 August 2007 but did not shoot at the range again.

He applied for a firearm permit at the Järvenpää Police Department of the Central Uusimaa Provincial Police Command on 3 October 2007. The application was for a 9 mm handgun, with Glock 17 and Luger/Parabellum guns specified. According to the application, the perpetrator intended to start precision shooting on the range of said Helsinki-based shooting club once or a couple of times a week. The place where the gun would be kept was given as a locked wooden cabinet, but the perpetrator stated that later he might consider buying a weapons locker. In the appendix to the application, the perpetrator wrote: 'I have been thinking about a suitable weapon for my hobby and am especially fond of the Glock 17. I have also heard many favourable reports on the gun's qualities. I have also already fired this type of gun a few times on the range and am quite pleased with it.' When asked whether he could use a smaller-calibre gun for his hobby, he wrote 'yes'.

The police commissioner of the Central Uusimaa Provincial Police Command signed a decision rejecting the application on 12 October 2007. The grounds for the rejection were that, because of its high firepower, the gun was not suited to precision shooting. The legal grounds for the rejection were found in the Firearms Act, Section 44, Subsection 1. According to the act, a purchase permit can only be granted for a gun that is not unnecessarily powerful or efficient for the purpose noted by the applicant. It was recommended in the decision that the applicant purchase a .22-calibre small-bore pistol, for example. The calibre measurement refers to 0.22 inches (5.56 millimetres), which is the standard calibre for small-bore rifles.

On 18 October 2007, the perpetrator delivered another application to the Järvenpää Police Department, this time for a smaller-calibre weapon. He applied for a Ruger MKIII on the grounds that 'The gun is not unnecessarily powerful or efficient. It is also a good weapon for a beginner. This weapon I have also fired.' When asked whether he could use a smaller-calibre gun for his hobby, he wrote: 'It's such a small-calibre gun (.22) I don't think I can. A bigger one I certainly could, but .22 is the smallest.'

A purchase and possession permit signed by the police commissioner both were granted to the applicant on 19 October 2007. As judged from the police records, the applicant's data had been checked in several police registers and found to be clean. The personnel at Police Department Customer Service met the applicant when he handed in his applications, but there were no interviews or personal meetings. According to the personnel, the applicant was extremely well-behaved and there seemed to be nothing special about the situation.

The perpetrator visited a gun shop in Jokela on 2 November 2007. A Ruger MKIII gun was not, however, available at that time. Instead, he purchased a semi-automatic Sig Sauer Mosquito pistol with 10-round capacity and 500 rounds for it. This happened five days before the shooting incident.

As far as can be established, the perpetrator went out to practise shooting his new gun just once before the incident. He went to the woods to practise and created a video of himself shooting an apple. He uploaded the video to the Internet. He had also mentioned his shooting hobby and buying a gun to a few friends. His family did not know about the gun.

In addition to the gun, the perpetrator was carrying a knife in his shoulder bag when he went to the school centre. He did not use the knife, however.

2.1.3 Lighter fluid and matches

After shooting the seventh victim, on the second floor, the perpetrator splashed flammable liquid on the floor and walls. He unsuccessfully tried to ignite the liquid with four matches, which were later found burnt out in the corridor. The liquid was in a 1.5-litre plastic mineral water bottle. The investigation at the National Bureau of Investigation forensic laboratory revealed that the liquid was two-stroke petrol (standard petrol mixed with a small amount of lubricant).

The attempt to set the building on fire was probably connected to the perpetrator's plans of causing maximal destruction, as expressed in his diary. He wrote: 'how marvellous my attack on humanity will be: people are dying, some in panic and others running away, some are maimed, smoke coming out of the building, the fire is spreading...'. As far as can be established, there was nobody nearby on the second floor when the perpetrator tried to set the building on fire, so it seems nobody was in immediate danger because of this.

2.2 The circumstances

On Wednesday morning, 7th November 2007, it was business as usual at the school centre and in Jokela. The students attended their morning lessons, and the upper secondary school students started their lunch break in the canteen at 11:30am. Having had a quick lunch, some of them were spending their time in the corridors. The perpetrator arrived at the school around this time and started shooting at 11:42am. The upper-level comprehensive-school students were still attending their lessons when events started to unfold. During the incident, it was overcast and dry with the temperature between zero and 1 °C.

2.3 The organisations and people involved in the incident

2.3.1 The perpetrator

The perpetrator was an 18-year-old male with no previous record of criminal activity. He and his family had been living in their house in Jokela for more than 10 years.

School attendance

In his first six years of school, the perpetrator attended a lower-level comprehensive school near his home. For his upper level of comprehensive school as well as upper secondary school, the perpetrator attended the Jokela School Centre. At the time of the incident, he was in his third year of upper secondary school. The perpetrator was a relatively diligent student who was seldom absent, and, on the whole, his studies had progressed normally.

In the tutor's interview during his first year of upper secondary school, the perpetrator said that on the whole everything was all right. He participated in team work at school and spent time with a few friends, chatting and 'hanging around' in the canteen, for example. He planned to study history, political science, or social psychology at university after graduation and the matriculation examination.

The perpetrator did well in lower-level comprehensive school, and in his first years in school he had quite a few friends. In upper-level comprehensive school, his friends became fewer and he gradually started getting worse marks. In upper secondary school, they averaged between 7 and 8. Toward the end of his second year in upper secondary school, his relatively constant level of marks became more variable. His favourite subjects were history, philosophy, social studies, and psychology, and it was in these that he did best, while maths and physical education were the subjects he found most difficult. In autumn 2007, he completed the matriculation examination test in history and received a good score for it.

Home circumstances

His mother, father, and younger brother all lived at the same address and spent a lot of time at home. The perpetrator also felt comfortable at home and liked to discuss and debate things with his parents. Music was a common interest for all family members.

They also spent time together watching television programmes and films. There were no major conflicts in the home.

The parents took good care of their children, but it seems their way of bringing them up was based on more or less unquestioned authority. The parents showed an active interest in what was going on in their children's lives. They communicated actively with the teachers, school staff, and the families of other children, even in situations that others may have considered to be not so important. The parents often visited the library to find books for their son that matched his interests. They saw to it that he did not play computer and other games that were excessively violent. In some instances, they even sold some to stop him from playing them. There are no indications of domestic violence or heavy use of intoxicants in the home.

In the last few months preceding the incident, the parents noticed that their son increasingly retreated into his room, spending much of his time sitting at his computer. It seems, however, that he did have plans for studies and the next summer.

Hobbies

The perpetrator had been interested in music since childhood, and his favourite outdoor activities included going for walks and cycling. Latterly, outdoor activities and active music-making had been left in the background and he mainly spent his leisure time at his computer or reading books, watching films, and listening to music at home. One of his interests was editing video clips. He also participated in housework occasionally.

The perpetrator was very interested in the social sciences, and he actively searched the Internet and literature for information on politics, various ideologies, philosophy, and international and ideological history. His long-term ideology was the improvement of society, but in time he became more and more interested in extreme political trends and ideologies.

Initially interested in Finnish party politics, in upper secondary school he developed an interest in extremist movements and eventually the school killings in the United States. He actively discussed these issues at school, at home, and on the Internet. It was around this time that he began to see violence as an acceptable way of improving things. He was also interested in the Unabomber.

A couple of months before the shooting incident, the perpetrator visited a shooting range in Helsinki and on his return told his family of his intention to start recreational shooting. His parents had reservations about his shooting hobby but at the same time hoped that it would improve his quality of life and encourage him to come out of his shell.

The Internet and computer games

The perpetrator played computer games and participated in discussions in various Internet communities. He also communicated via the Internet Messenger program, both with his school friends and with foreign Net acquaintances.

The games he played were mostly popular strategy and war games, many of them shooting games requiring strategic and teamwork skills, such as Battlefield 2. He also played Civilization games, one of the best-known games simulating the history of civilisation. One of the more unusual games he played was JFK, which is based on the assassination of US President John F. Kennedy. On the other hand, the Splinter Cell and Hitman games that he played emphasise the skill component and focus on non-violent problem-solving skills instead of just blasting away.

The perpetrator presented and discussed his plan on the Internet and spent a lot of time online. He participated in discussions of school killings in a Web community with approximately a dozen members that focused on the Columbine school shooting. School killings were admired in at least some of the discussions. The community was part of a Finnish service with an enormous number of communities, dedicated to various topics; in July 2008, there were more than 200,000 of these. Participating in discussions in the community or talking about school killings was not illegal, and these discussions formed but a tiny fraction of the discussions in the service.

Starting in summer 2007, the perpetrator had a foreign girlfriend on the Internet who also participated in the discussions on school killings. In the autumn, this Internet girlfriend found a new boyfriend in the discussion group and distanced herself from the perpetrator. The discussions between these three deteriorated into mutual slander and name-calling that was at times aggressive. The perpetrator was called childish and immature, and he repaid in kind. On the night before the shooting, the perpetrator apologised to the Net community for his rude behaviour.

That same evening, out of context and without explaining in any way, he also told a Finnish chat partner that soon it would be time for him to leave. When asked about his military service, he answered that he did not know whether he would still be alive then. His comments in the discussions contained clear indications of his admiration for school killers and even the possibility of him committing a similar act himself. However, he did not seem to have a definite plan, as he did not specify a time or location. He said he had been considering it for several days, but in his last comment, at around 10pm, he said he would have to think about it

Bullying

The perpetrator's parents told the authorities that when he was in the fourth year of comprehensive school he had become a target of bullying. This gradually became worse in the fifth and sixth year. When the perpetrator was in the fifth year, he said in a health questionnaire that the bullying irritated him. During the perpetrator's years in lower-level comprehensive school, his mother repeatedly made contact with the school because she considered the school's educational methods too lax. The perpetrator's parents felt the school was too tolerant of swearing, bad manners, and bullying. According to his teachers in lower-level comprehensive school, the perpetrator was not bullied in any particular manner. The school's opinion was that the behavioural norms applied in the perpetrator's home were no longer current with young people. The teachers felt that this made it difficult for the perpetrator to get along with other boys in school. The parents also made contact with parents of other students, telling them their

children behaved badly. The other parents found this annoying, and some told their children to avoid his company. In the perpetrator's years in lower-level comprehensive school, this issue was never taken up by the Student Welfare Team, and the school and the parents never saw eye to eye on the matter. The mother participated in Parents' Night events when the perpetrator was in lower-level comprehensive school but stopped going when he went to upper-level comprehensive and upper secondary school.

In 2002, the bullying was mentioned in the school doctor's and nurse's reports and in a background data form filled in by the parents. The perpetrator had answered 'yes' to the question 'Are you bullied / discriminated against / taunted at school?' on the form. As the perpetrator did not have any friends during his years in upper-level comprehensive school, his teachers harboured suspicions of bullying. It is probable that the Student Welfare Team discussed the matter twice, but there are hardly any records and recollections seem rather feeble on this. A student recounted that, in the seventh year, almost all of the boys in the perpetrator's class had been told to participate in a discussion led by the education welfare officer. The topic was the alleged bullying of the perpetrator.

Some students and teachers report having seen the perpetrator being bullied in upper secondary school, too. According to them, he was especially bullied verbally – for example, by taunting and heckling. This was probably because he dressed more neatly than others, he expressed his extreme opinions vociferously, and his interests were generally different from those of other youngsters. He was also bullied for his insecurity and involuntary blushing. After a school doctor's examination in the perpetrator's first year in upper secondary school, the doctor wrote in his report that the student was still being bullied. In a school bullying survey performed at the school in 2006, a student reported that the perpetrator was being bullied and also talked with the teacher about this. According to the student, the bullying had been going on for years.

The issue was brought up in the Student Welfare Team and action was taken. When the issue was again discussed in a team meeting, it was agreed that the situation had been taken care of. There was an incident wherein the perpetrator was apparently jostled and the head teacher discussed it with both the bully and the victim. The perpetrator denied having been jostled and told the head teacher and other teachers that he did not want it to be discussed. When a teacher asked his class whether the perpetrator was being bullied, the answer was negative. Instead they said that the class just sometimes engaged in a little horseplay. In this respect and others, some teachers and students do not think the perpetrator was actually bullied.

The perpetrator's health status

The perpetrator suffered from loneliness, involuntary blushing, and insecurity. This combined with his short stature to make social situations very difficult for him. These problems led him to seek medical care with the School Health Service when he was 16. The school doctor recommended physical exercise and prescribed an SSRI (selective serotonin reuptake inhibitor) for the perpetrator's panic disorder and fear of social situations. The medication was started in small doses in April 2006 – i.e., approximately a year and a half before the incident. Initially the perpetrator improved, but later the

medication seemed to lose its effectiveness and the dose was increased. In 2007, the perpetrator's visits to the doctor were few and far between. His prescriptions were often renewed by phone. His last medical examination was his military service call-up examination in spring 2007.

Use of SSRIs is not recommended for minors. If such medication is prescribed nonetheless, the follow-up should be intensive and the patient should personally visit the doctor. A comprehensive treatment plan was not drawn up for the perpetrator, although this would have been necessary to estimate his health status, for performing adequate follow-up, and to determine the need for any other treatment.

Between December 2006 and January 2007, the perpetrator's parents requested his referral to the Adolescent Psychiatry Outpatient Clinic. This was refused, as the perpetrator's symptoms were deemed mild and it was decided that before a resort to hospitalisation, an attempt would be made to treat them first in basic health care by using anti-depressants. The parents were also told that, because of long queues and a shortage of resources, referrals could be made for only patients with significantly more serious symptoms.

Despite the parents' support, the perpetrator took his medication irregularly and by the autumn of 2007 did not want to use it any longer. In the months preceding the incident, he behaved in an exceptional manner and threateningly toward some other youngsters, which frightened them and made them worried about the perpetrator's situation. He had always been considered quite calm and peaceful in disposition. He did not use drugs or smoke and seldom drank. During the incident, he was not under the influence of alcohol, medication, or other drugs.

It seems likely that he was very nervous about his military service call-up in November 2007. In the call-up medical examination, his fitness classification was E for mental health reasons, which would have meant deferment for three years. The perpetrator behaved very matter-of-factly in the examination and did not mention his symptoms of depression or suicidal intentions in the medical questionnaire.

2.3.2 Jokela Upper-Level Comprehensive School and Upper Secondary School

The school was established in 1957, and classes at the upper secondary school started in 1963. The first graduates sat their matriculation examination in 1966. In 1976, the school was divided into an upper-level comprehensive and upper secondary school, but these were administratively reunited in 1992.

At the time of the incident, the upper-level comprehensive and upper secondary school at the Jokela School Centre formed a tightly knit unit. They shared facilities, and the head teacher and some other teachers worked in both schools. There were 489 students in total, 318 in upper-level comprehensive and 171 in upper secondary school. The school centre employed a total of 43 teachers, 33 of them for upper-level comprehensive and 10 for upper secondary school. Four of the upper-level secondary school teachers worked in both schools. The staff comprised nine other employees, with various duties. Some of them worked part-time; these were the classroom assistant, personal assistant,

school psychologist, education welfare officer, school nurse, school doctor, and evening-shift janitor.

The education offered by Jokela Upper Secondary School is non-graded; i.e., the students are not moved from one class to another annually. Instead of the usual terms, the school year is divided into five 'periods'. A student's curriculum includes compulsory, optional, and specialisation courses, each of them consisting of an average of 38 lessons divided over a period of five to six weeks. The students plan their curricula individually; i.e., they select the courses they intend to study in each period. A student typically studies 4–6 courses in each period, after which there is a separate test week, during which the students sit their course examinations. These are then evaluated, and after that the next period starts. It takes an average student three years to complete the required courses (a minimum of 75), but this may be shortened to two years or extended to four years according to the student's needs. To ensure that every student has an individual study plan in accordance with his or her needs, the school has invested heavily in guidance counselling. In practice, most non-graded upper secondary school students follow an 'average' curriculum in their studies, as resources are insufficient for providing each student with a totally independent curriculum.

For such a small upper secondary school, Jokela Upper Secondary School offers an impressive number of specialisation courses. The students who selected a science-oriented curriculum in upper-level comprehensive school are offered the opportunity to continue their science studies in upper secondary school. The specialisation courses include a course for literature buffs, a media course, a course in creative writing, a grammar course, and musical theatre. In physical education, a basketball team and a riding course are available. These courses may be studied in contact study or either partly or wholly independently. In addition to standard upper secondary school courses, a student may select upper secondary school diploma courses in art and physical education. Students may also study some courses independently via the Internet, and some are available in a foreign language, usually English. This is a UNESCO school, so international co-operation is an important part of its activities.

Communality at Jokela Upper Secondary School

Many Jokela residents feel their community is just the right size. For the most part, people know each other at least by sight and greet each other when they do their shopping, for example. Still, the community is not too close-knit or reclusive. The main reason is probably the proximity of the Helsinki metropolitan area and the cities of Hyvinkää and Järvenpää.

Jokela residents regard their school centre too as just the right size. It is a neighbourhood school, and many students live outside the Jokela area. Most of the upper secondary school students attended comprehensive school at the same school centre, so usually they know each other quite well. Some of the teachers work in both the upper-level comprehensive and upper secondary school, and the upper secondary school teachers know most of the students by name. The students study the majority – an estimated 80 per cent - of their courses and lessons in more or less the same group. Guidance counselling plays an important role, and there is an active tutor system in the

school. Seeing a teacher chatting with a student in one of the corridors is an everyday sight.

Integration into daily life at the school has been made easy for the first-year students at the upper secondary school, as there are many orientation activities through which the students soon get to know one another. Each group is assigned a teacher as a tutor, who provides guidance counselling and helps with school-related matters. Once a week there is a guidance counselling session for the students and a tutor's interview during the first and second year. After each period, a staff meeting is held at which any problems in a student's progress are discussed.

There is also an active student association at the school. Since the completion of the extension and renovation, the students and staff have been happy with the facilities. The upper secondary school students have their own lounge with computers and an Internet connection. An upper secondary school cultural club called the Jokela Circle meets weekly at the school for approximately an hour. A natural science club and an adventure club are also active at the school.

Communality is all about the feeling of participation, of belonging, and of being part of something. It is also about social relationships and interaction – i.e. about doing things together, about talking, listening, and caring about one another. In a well-functioning community, the individual feels important, accepted as him- or herself, and valuable. These principles are not realised if there is bullying in the school community.

Another aspect of communality is the work atmosphere, which at Jokela Upper Secondary School had been problematic for some time. There were disputes between the teachers and the administration, and it showed in staff meetings. One bone of contention concerned the compensation paid to teachers for extra work. That the teachers had been under pressure due to the renovation that had lasted the best part of two years and the preparations for the school's fiftieth-anniversary celebrations may have had an impact on the atmosphere. On the other hand, it is conceivable that this common effort could actually have brought about a heightened sense of communality. The work atmosphere problems had, however, been addressed, and there had been efforts to find a solution.

Co-operation between school and parents

The Parents' Club at the Jokela School Centre had a board in 2007–2008 consisting of 10 parents and the teachers' representative. The aim of the club is to improve parenting skills, provide support for the students, and promote co-operation between the school and parents. A parents' cafeteria is also part of the club's activities.

The school makes an effort to keep the parents informed of school policy and how it supports the student in his or her studies. This information is provided by the study guide, an informational booklet published every autumn, the school's Internet site, and the tutors. The parents can monitor the progress and absences of their minor child with the help of 'period reports', issued after each period. Thanks to the co-operation between the school and parents, absence monitoring is considered to work extremely

well at Jokela Upper Secondary School. On the other hand, the investigation revealed that, as regards bullying and its prevention, the co-operation between the school and parents leaves something to be desired, starting in lower-level comprehensive school.

Parents are encouraged to contact the tutor, guidance counsellor, head teacher, or school nurse directly when necessary. Parents' Night events are held annually, and parents are also welcome to attend all extracurricular activities: celebrations, parties, and other events.

During the perpetrator's upper secondary school years, his parents contacted the head teacher, other teachers, the school nurse, and the school doctor at one point or another. These discussions did not leave the parents with the impression that things were going especially badly at school. The co-operation became more difficult after the perpetrator turned 18 in the summer between his second and third year at the school. After a student turns 18, the school staff are not allowed to discuss his or her issues even with the parents without the student's permission.

2.3.3 The organisation and methods applied for student and pupil welfare

The Student Welfare Team

Like all upper secondary schools, Jokela Upper Secondary School has a student welfare team that meets once or twice a month. Utilising their expertise and know-how in their respective fields, the team members aim to promote the welfare of the students and the whole school community, as well as to create a better learning environment. The team also endeavours to prevent learning problems, seek solutions, and refer students in need of further assistance to health-care and social services authorities. The aims of the team are to promote safety and a healthy learning environment in the school community; to evaluate the need for remedial and special-needs teaching; and to address student-specific issues such as learning difficulties, mental health problems, bullying, and absence. When necessary, the team co-operates with the parents of minor students. The team monitors the students' progress and tries to identify the ones who need help. At Jokela Upper Secondary School, the team consisted of the head teacher, the education welfare officer, the school nurse, and a teacher.

The corresponding body at the upper-level comprehensive school level is the Pupil Welfare Team. In Jokela, the members included the head teacher, the education welfare officer, the school nurse, a special-needs teacher, the tutor, the guidance counsellor, and (when necessary) the school doctor. A psychologist attended the Pupil Welfare Team meetings monthly but was asked to participate in Student Welfare Team meetings only when there was a special reason for this.

The upper-level comprehensive-school team met on a weekly basis. Informal minutes were kept, which helped the team members to focus on the task at hand. The team received reports from the tutors and eighth- and ninth-year student tutors, then discussed the issues and agreed on who would approach the student and who would serve as a liaison with the parents. In each meeting, it was standard procedure to make sure that all

current issues had been addressed. At regular intervals, the Pupil Welfare Team organised a bullying survey.

The School Health Service and Student Health Service

Prior to the shooting incident, the School Health Service and the Student Health Service organisation at the Jokela School Centre consisted of the school nurse, the school doctor, the education welfare officer, and the school psychologist.

The school nurse was mainly occupied by her duties as Jokela School Centre school nurse. Her duties included 22.25 hours, or three working days, a week at the Jokela School Centre, with 496 students in her care. She allocated 16 of her weekly working hours to Perttu School, with 300 students in her care. She also worked eight hours a month at Vanhakylä School, with 94 students. In addition, she was the Tuusula Municipality infectious disease nurse. All in all, she had 890 students in her care. The Health Centre doctor worked five hours a month at the school centre, with the abovementioned 496 students in his care.

The students undergo a standard School Health Service health check performed by the school nurse in the second, fourth, and sixth year. In upper-level comprehensive school, there is a check in the eighth and ninth year, and in upper secondary school one is performed during a student's second year at the school. A school doctor performs a medical examination of students in the sixth and ninth year and, if necessary, during a student's second year at the upper secondary school.

Education welfare officer and psychologist

A single education welfare officer and a psychologist cater for the six lower-level comprehensive schools, two upper-level comprehensive schools, and two upper secondary schools in the Jokela area. All told, they are responsible for 1,967 students, 1,110 of them in lower-level comprehensive, 561 in upper-level comprehensive, and 296 in upper secondary school. As a rule, 10–14 of the education welfare officer's weekly working hours were allocated to the Jokela School Centre, mainly in upper-level comprehensive school. At the lower-level comprehensive schools, the welfare officer's main duty is to participate in Student Welfare Team meetings. The education welfare officer aims at providing support for children and youngsters in comprehensive school, in relation to both school matters and life in general, co-operating with other authorities when necessary. The psychologist provides support for the children and young people's psychological growth and development as well as learning and mental health, especially in lower-level comprehensive school and special classes.

Mental health services

As far as the mental health problems of comprehensive-school and upper-secondary-school students in Jokela are concerned, the key health-care professionals are the school nurse, the education welfare officer, the psychologist, and the school doctor. As mentioned above, these persons all worked in other schools as well. Since the incident, there has been an increase in the resources available for the School Health Service.

At the time of the incident, students with mental health issues were usually referred to the Child and Family Guidance Centre; the Järvenpää Adolescent Psychiatry Outpatient Clinic; or, in substance abuse cases, the Tuusula Youth Clinic. In 2006, 23 new families visited the Child and Family Guidance Centre and 24 youngsters from Jokela were referred to the Adolescent Psychiatry Outpatient Clinic. Prior to the events of 7 November, 11 youngsters from Jokela visited the Tuusula Youth Clinic, also known as the substance abuse clinic, in 2007.

The Student Health Service lacked a general plan jointly agreed upon by all authorities involved in mental health care for students.

In the Hospital District of Helsinki and Uusimaa, which also comprises the Jokela area, there were 1,433 people on the Adolescent Psychiatry Ambulatory Care waiting list in December 2006. Of these, 15 per cent (or 215 people) had been on the list for more than three months. A shortage of doctors and the limited availability of external medical services have been suggested as reasons for this situation.

The Adolescent Psychiatry Outpatient Clinic for the Järvenpää–Mäntsälä–Tuusula area, established in January 2007, is situated in Järvenpää, with regional clinics in Mäntsälä, Tuusula, Jokela, and Kellokoski. Between January and August 2007, 168 patients in total, in three urgency categories, were referred to the clinic. A first visit within three months of referral, as required by the care guarantee, was arranged for 93 per cent of the adolescents. The remaining 7 per cent, or 12 adolescents, had to wait more than three months. They had been referred to the clinic from Family Guidance Centre facilities or the Child Psychiatry Clinic responsible for the patient's care.

2.3.4 Youth services

Tuusula Municipality is responsible for youth work in Jokela. The work is based on the Municipal Administrative Code, the Strategy for Youth Work approved by the Youth Board, and the annual municipal budget. Prior to the shooting incident in 2007, the activities were centred on the Jokela Community Centre, which employed one full-time and two part-time youth leaders as well as a janitor and was open four nights a week. It offered youngsters a place to spend their leisure time in the company of other young people and to discuss personal matters with the workers.

The municipality also employed a youth worker, who divided his time between Jokela and Kellokoski. This worker mingled with young people in the centre of Jokela and was responsible for contacts between the Jokela School Centre and youth services workers.

The perpetrator did not visit the Community Centre, but the youth worker approached him in the months leading up to the incident and had a few discussions with him.

2.4 The organisations' crisis prevention and preparedness for exceptional circumstances

2.4.1 The school

Preparedness for exceptional circumstances

To increase safety in Finnish schools, the National Board of Education compiled an electronic material package containing material concerning the work environment, for instance. With the help of this material, schools can identify and assess any safety hazards and draw up plans to eliminate them. Having a plan makes it easier to act appropriately in a crisis. The aims are to help individuals remain functional in such a situation, to provide support in the recovery process for both adults and children, and to prevent psychological and physical harm. The purpose of the plan is to enable the school community to act appropriately in a situation threatening the psychological or physical safety of the community or its members.

The Jokela School Centre has a rescue plan, required by the Decree on Rescue Services, and a more extensive crisis plan, required by the National Board of Education. The Rescue Plan was last updated on 4 August 2006 and, according to a Rescue Services estimate, is of fair quality as school rescue plans go.

Crisis plan

The Jokela Upper-Level Comprehensive School and Upper Secondary School Crisis Plan was drawn up during the 2004–2005 school year and was approved by the Tuusula Municipality Education and Library Board. The Crisis Plan is kept in the place reserved for it in the staff room.

It deals with situations involving the death of a student, a staff member, or a relative of either and provides instructions on how to inform the community about the situation, participation in funerals, and after-care. In case of an accident, the plan includes instructions on how to call for help, how to notify the head teacher and inform the students, how to organise a staff emergency meeting, and how to inform the parents. After-care receives a chapter of its own.

The Crisis Plan also includes instructions for calming down a student who is behaving threateningly. The staff member is advised, for instance, to remain calm and carefully try to placate the student. Staff are instructed to call the police in extremely aggressive or threatening situations. Last of all, the instructions emphasise the importance of debriefing and after-care. Staff are encouraged to ask the school nurse, the education welfare officer, or social authorities for help.

The plan also provides instructions for dealing with domestic violence and students with suicidal thoughts. As regards school bullying, the plan provides the following: a definition of school bullying, a description of preventive measures, an outline of appropriate measures after bullying has been observed, and details on how after-care should be organised. Bullying is defined as physical violence or threatening it, and

especially psychological violence, which includes, for instance, verbal abuse and heckling but also negative gestures and tones, shrugging, criticising a person's appearance, gossiping, and refusing to greet a person.

The section of the plan concerning preventive measures provides the reader with instructions on discussing bullying, developing social relationships, and promoting a more tolerant atmosphere. The material on measures to be taken after bullying has been observed is divided into two sections, one on physical bullying and the other on psychological bullying.

According to the instructions, an assault should be dealt with immediately, and, if necessary, the police should be called. The parties' parents should be contacted, and the situation should be monitored via regular visits to the school nurse or the education welfare officer. As to psychological violence, the plan states that every staff member is under obligation to intervene. Staff should contact the Student Welfare Team, who will then discuss the matter and decide the steps to be taken. Students and their parents are encouraged to report any bullying they observe. The plan instructs the staff to consider whether the alleged bullying is repeated, as, according to the instructions, a single humorous remark does not constitute psychological violence. Parents and tutors are to be notified of all instances of school bullying. Where there is an exceptionally tangible threat of psychological or physical violence, the teachers are instructed to commit the whole class to non-violence by means of a so-called Stop Bullying Agreement to be signed by every student.

The last section of the Crisis Plan deals with substance abuse intervention, followed by references and contact information. The plan does not include any instructions concerning accident prevention or self-rescue.

Rescue plan

At the time of the incident, the Jokela School Centre had a property safety plan filled out on a Tuusula Municipality official form. In modern legislation, a plan of this type is called a rescue plan. The plan was signed in August 2004 by the head teacher and the rescue leader. The plan had been drawn up for the 1958 property with two two-storey buildings on the site. The number of people in the building in daytime was given as 542. According to the plan, the staff are to be informed of its main points in staff meetings.

Possible hazards listed in the plan are fire, the proximity of the railway, the proximity of main roads, the airfield, a radiation leak from a nuclear power plant, drugs, and the dispersal of dangerous substances. The safety personnel consisted of the head teacher and the rescue leader, who was one of the teachers at the school centre. The school nurse and three other teachers were mentioned also.

The emergency instructions included the caretaker's and the evening-shift janitor's contact information; the electricity, district heating, and water supply fault report telephone numbers; and instructions on how to stop the school's ventilation. In case of an accident or sudden illness, the plan also listed the contact information for the Emergency Response Centre, the Poison Information Centre, the local Health Centre,

the nearest hospital, and the nearest dentist. Four general emergency instructions are given: 1) assess the situation and determine what exactly has happened, 2) assist any person in immediate danger, 3) render emergency first aid, and 4) call 112 for emergency help.

The plan includes instructions for response to a general alarm signal. To make sure that everybody has heard the signal, the staff are to make an announcement over the PA system. For a gas or radiation threat, the plan states that a general alarm signal will be sounded, after which the instructions in the plan should be followed. There was no public shelter in the building when the plan was drawn up, and the one in the Community Centre was cited as the nearest. The school gym, canteen, and sports field were listed as temporary shelters. According to the plan, the personnel have the necessary protective equipment and first-aid kits at their disposal, as well as a guide for case-specific emergency planning. A radiation dose monitor, however, was missing. A public shelter was built during the renovation completed in 2006, and it was included in the Rescue Plan in the autumn of 2008.

As to fire safety, the plan states that everything had been found to be in order in the last fire inspection. The plan provides the following general instructions in case of fire: 1) rescue and warn, 2) extinguish, 3) ring 112, 4) retard the fire, and 5) guide the rescue units. The sports field at the north end of the building was given as the emergency assembly point. According to the plan, rescue drills were to be held each school year, with the Fire Department taking part as often as possible.

The plan further states that under exceptional circumstances, the Municipal Command Centre is to be in the Rescue Department and that the Jokela rescue-sector leader shall also be in charge of the Rescue Sector Command Centre.

2.4.2 The police

Police preparedness for incidents of this general nature

As the sphere of police activities covers a wide array of circumstances, the police are usually called whenever something unusual happens – e.g., a criminal act, an accident, a mass gathering, or a demonstration. Preventive measures are also part of police activity.

Preparedness is defined as the preparations made for crisis situations and exceptional circumstances. Preparedness includes performance of duties in everyday routine tasks, in special situations, and in exceptional circumstances. The aim is to anticipate crisis situations and to limit their impact. Maintaining the authorities' operational status is another essential element of preparedness.

To be able to function professionally, efficiently, and safely, the police have to prepare themselves for every eventuality. Professional skills, training, and equipment can be considered to constitute the basic level of preparedness. Police training provides all policemen with general operational procedures, which are then applied situation-specifically and facilitate co-operation among police officers from different units. The training utilises information on the latest threat perceptions both in Finland and abroad

and uses it to develop the trainees' skills in both basic and in-service training. In-service training, provided both centrally and locally, includes training in situations involving a specific threat.

In addition to threats already identified, the police have to be prepared for any other possible threats and emergencies at all times. Instructions involving the Tactical Emergency Medical Services have been drawn up for special situations.

The organisation and command structure of daily police activities are highly adaptable and can be accommodated quickly to meet the needs of a special or emergency situation. This enables the rapid deployment of additional units, as was seen in Jokela.

In addition to regional police units, there is a national readiness unit under the Central Uusimaa Provincial Police Command. This unit is typically alerted when an assignment involves a clear and present threat to life or health or if specially trained personnel and equipment are necessary to perform the task safely.

Several policemen with training for such special situations were involved in the operations in Jokela on 7 November 2007. The most demanding tasks were performed by the readiness unit and those policemen of the Central Uusimaa Police Department with training for special situations.

Preventive measures employed by the police

The preventive measures employed by the police are aimed at preventing situations that might lead to a crime or accident or at identifying potential perpetrators and victims before a crime is committed or an accident has occurred. Such measures employed by the police include protection advice, interest group co-operation, work with regional and neighbourhood police, education, school police work, preventive information, and participation in various events and campaigns. In recent years, much informative material with a special focus on adolescents has been produced to support the preventive measures mentioned above. An example is the informative video programme on the consequences of bullying that was produced by the Vantaa Amateur Theatre in co-operation with the police.

The police often co-operate with other authorities and organisations to organise various projects, campaigns, and events. The general law enforcement done by the police (i.e., making their presence felt) is also considered a form of crime and accident prevention. According to the National Police Strategy, the prevention of crime, disturbances, and accidents is an essential element in all police work.

Neighbourhood police work refers to prevention of crime and disturbing behaviour by a local unit responsible for a certain area. The area comprising the three municipalities of Järvenpää, Kerava, and Tuusula, which constitutes the Central Uusimaa Provincial Police Command area, is divided into six areas, each with its own neighbourhood police unit. Preceded by groups such as village police, the neighbourhood police system was introduced in the 1970s. Co-operation on a local level is the key concept in neighbourhood police work. The emphasis is on prevention and early intervention, especially as regards children, youth, and families in danger of becoming marginalised.

The police are actively involved in planning municipal safety plans, which in Central Uusimaa was undertaken as a joint venture of the Järvenpää, Kerava, and Tuusula municipalities. Among the safety planning and early intervention measures taken there are a project for the prevention of petty theft, crime conciliation, and placement of a social worker's station in the police department.

The plan includes a separate section on a safe study environment, with school and nursery school policemen cited as one method of providing this.

Most of the school visits in the Central Uusimaa area since 1998 have been made by a team of about a dozen policemen specialising in youth work. The patrol policemen and investigators who work in this team do so only part-time, each of them contacting a single lower-level comprehensive school and offering to deliver lectures. For upper-level comprehensive schools, special Police Days have been arranged with up to six policemen participating.

Third-year students are given traffic education, and fifth-year students receive information on petty theft, compensation, school bullying, and the effects of intoxicants. The topics discussed with seventh-year students include legal knowledge, penalty systems, the effects of a criminal record on a person's future, the application of criminal law in different age groups, and the Tort Liability Act. The Child Welfare Act and its application to offences committed by minors has been taken up also. Eighth-year students were given traffic education, and ninth-year students received substance abuse education. In many instances, the police officers visited several grades, especially in schools with combined classes.

The police visits to the Jokela School Centre were conducted along these lines. Over the years, numerous Parents' Night events have been jointly organised in Jokela by the school and various organisations. Anti-drug information sessions have been arranged for both teachers and parents. At the school's request, the police have also participated in the lower-level comprehensive school's Traffic Education and Bicycle Days. Police work was discussed in guidance counselling lessons. A local policeman participated in the Jokela Community Commission when it was planning a safer living environment. Any special requests have been accommodated by the police whenever possible.

Over the past 10 years, the head teacher of the Jokela School Centre has contacted the police on a few occasions, in connection with certain isolated problem issues, but the police are not aware of any exceptional problems where the school centre is concerned.

2.4.3 Emergency Medical Services

Jokela is part of the Hospital District of Helsinki and Uusimaa (HUS), which is divided into five hospital areas that possess a high degree of administrative autonomy. These are the Tammisaari, Lohja, Hyvinkää, Porvoo, and Helsinki University Central Hospital (HUCH) areas. Jokela belongs to the Hyvinkää hospital area, which is bordered to the south by the HUCH hospital area, in turn, divided into the three sub-areas of HUCH Helsinki, HUCH Jorvi, and HUCH Peijas. The Emergency Response Centres for the hospital areas are as follows: the Helsinki ERC is responsible for alerts in the City of

Helsinki; the Eastern and Central Uusimaa ERC is responsible for alerts in the Hyvinkää, HUCH Peijas, and Porvoo hospital areas; and the Western Uusimaa ERC is responsible for alerts involving the HUCH Jorvi, Lohja, and Tammisaari Emergency Medical Services and Rescue Services.

Tuusula Municipality made the decision to procure its emergency medical services from the Central Uusimaa Rescue Department. According to an agreement among the municipalities in the area, the doctor responsible for the Hyvinkää hospital area Emergency Medical Services is also responsible for the medical guidance and supervision of the municipalities' Emergency Medical Services work. Both basic- and paramedic-level emergency medical technicians work in the area. Emergency medical care doctors in the HUS area operate in the Emergency Medical Care Unit at HUCH. The HUCH Emergency Medical Care Unit is responsible for emergency medical care doctor on-call duty for both the Helsinki Doctor Unit (the City of Helsinki) and the medical helicopter (Medi-Heli 01, rest of the HUS area).

According to the Emergency Response Centre Act, each authority shall determine beforehand which units to alert in each situation – i.e., which is responsible in each of the responses specified for that sector. The Hyvinkää and HUCH Peijas emergency medical care doctors have provided instructions for the ERC for both daily activities and exceptional situations including national emergencies. As the Helsinki–Vantaa airport is in the Eastern and Central Uusimaa ERC area, national emergency instructions play an important role in the activities in the area and are constantly tested in drills.

In the case of the Jokela incident, the ERC followed the HUCH Peijas hospital area's national emergency instructions and alerted ambulances and authorities accordingly.

The medical chief at the site maintains contact with the medical chief at the hospital. The Töölö Hospital medical chief is also the medical chief for the HUS area. On the basis of the alert and any additional information, this person makes the decision as to which HUS hospitals are placed in readiness to receive patients. Communications are handled through both the GSM network and the Public Safety Network.

The tactical emergency medical care required by the police and health-care authorities is provided by Rescue Department emergency medical care professionals specially trained for police operations.

2.4.4 The Rescue Services

Jokela is part of the Central Uusimaa Rescue Department operational area. The Central Uusimaa Rescue Department provides rescue services for the cities of Hyvinkää, Kerava, and Järvenpää as well as the municipalities of Mäntsälä, Nurmijärvi, Pornainen, and Tuusula. The operational area is 1,986 km² and has a population of approximately 405,000.

For immediate deployment, the Rescue Department has a fire marshal on call, two fire chiefs on call, nine rescue units, two heavy rescue vehicles, 3–4 aerial platforms, and 2–3 fire trucks. A rescue unit comprises an officer and three fire-fighters.

63

The Rescue Department also provides ambulance services. There are eight basic-level and five paramedic-level ambulance units in readiness for emergency medical care at all times.

Additional reserves are provided by the 520 fire-fighters and off-duty personnel of the 32 part-time and volunteer fire brigades. The Rescue Department area is so small in its size that a force of two rescue companies² of the forces in readiness and part-time and volunteer fire brigades can be deployed anywhere in the area within an hour of the alert. Of the units in immediate deployment readiness, those nearest to Jokela are in Hyvinkää and Järvenpää. Both of these locations sent a unit to the site. The distance to Jokela from both fire stations is approximately 10 km.

The volunteer fire brigade in Jokela is the Jokela Volunteer Fire Brigade. Its standard deployment time on weekdays between 7am and 5pm is a rescue vehicle with a strength of 1+1 in less than 10 minutes. In the evenings and on weekends, the deployment time is a rescue unit with a strength of 1+5 in under five minutes.

The operations and unit response times of the Rescue Department in the Jokela incident are included in the Emergency Report, the Accident Report, and the reports of those in command at the site – i.e., the head of the Rescue Department on call, the two fire chiefs on call, and the unit leaders of the two rescue units.

Rescue Services preparedness for accidents in schools

To maintain ability to act efficiently and successfully in rescue situations, the Rescue Services need to be prepared for all kinds of eventualities. The rescue authorities do not usually draw up building-specific or incident-type-specific plans for schools. Instead, they rely on the tactical methods learnt in professional training and in operations. Rescue operations in schools are based on rapid rescue of people from the building by ensuring their self-rescue and via evacuation, if necessary.

To facilitate rescue operations, a rescue information sheet is prepared for buildings with an automatic fire detection system or a fire-extinguishing system. This sheet comprises text, pictures, drawings, and diagrams that provide information on the building that is vital in rescue operations. Some Central Uusimaa Rescue Department rescue information sheets are in physical files; others are in electronic form. During the incident, the Jokela School Centre's rescue information sheet was with the fire chief on call so it was available at all times. The fire detector diagram, with a floor plan of the building, was in the fire detector control panel. The rescue information sheet and fire detector diagram data are checked in every fire inspection.

² According to the preparedness instructions issued by the Ministry of the Interior, the rescue work units are as follows:

^{1.} A rescue unit consists of a leader, a driver, and at least one and at maximum three teams of two rescue workers.

^{2.} A rescue platoon consists of a leader and at least three but no more than five rescue units.

^{3.} *A rescue company* consists of a leader, headquarters staff, and a minimum of three and maximum of five rescue platoons.

Individual emergency planning actions, safety planning, and structural safety are the key concepts in school rescue activities. Regular fire inspections have been carried out at the Jokela School Centre by the Rescue Department.

Prior to the incident, the latest fire inspection in the school centre had been performed in May 2007, preceded by inspections in 2006, 2005, and 2004. In July 2006, an additional fire inspection was performed, due to the completion of the extension. The items inspected then included fire detectors, the public shelter, indicator lamps, the number and placement of fire-extinguishing equipment, and cylinder locks and keys. In earlier years, fire inspections had revealed defects in the closing mechanism of fire doors and emergency exit signs. Some portable fire extinguishers had been found not to function properly. After the fire inspections in 2004–2005, building maintenance was upgraded, which resulted in fewer deficiencies. The last inspection before the incident, however, revealed deficiencies in the emergency exit signs (a very common occurrence in school buildings). The school authorities were notified of this and given instructions for installing the signs correctly.

Rescue authorities have also participated in the organisation of evacuation drills. The latest of these in the Jokela School Centre was simultaneous with the 2004 fire inspection. The rescue authorities have also recommended that schools organise their own evacuation drills.

The Jokela Volunteer Fire Brigade has provided fire-extinguishing training at the school centre. The training was given in connection with a national information campaign directed at eighth-year students and was offered to teachers as well.

2.4.5 The Voluntary Rescue Service, the Finnish Red Cross, and psychological support provided by the Church

The Voluntary Rescue Service (VRS) consists of around 50 associations and organisations co-ordinated by the Finnish Red Cross. The VRS acts as a support organisation for all authorities in situations where such assistance is considered necessary. When the Emergency Response Centre alerts the VRS, its own alert organisation starts locating and alerting the required personnel. Situations in which the VRS provides assistance for authorities include supporting rescue authorities in an operation involving multiple patients by offering clothing, food services, or shelter and participation in the search for a missing person.

The psychological support provided by the Church is part of the psychosocial support network and is rendered in accordance with the instructions of the General Synod. It is not part of the VRS but participates in providing support for the relevant authorities in crisis situations. A dedicated psychological support organisation with approximately 200 workers operates in the Helsinki metropolitan area.

2.4.6 Victim identification procedure

A disaster victim identification (DVI) unit was established in Finland under the NBI in 1991. Its task is to identify disaster or other victims who cannot otherwise be reliably

identified. The aim is to establish the victim's identity beyond all doubt so that he or she may be pronounced officially dead. The unit consists of NBI personnel, a forensic pathologist, a forensic dentist, and their substitutes. The unit also includes a psychologist and a theologian. Furthermore, there are agents with DVI training in police forensic science laboratories in all Finnish provinces. All those participating in identification operations have received special training for this.

The Finnish DVI Unit utilises a procedure approved by Interpol member states, supplemented with methods developed in the NBI. The Interpol procedure has proved reliable and is therefore utilised to maximise reliability in victim identification.

The identification is based on the use of two identical sets of forms, one of which is used to collect all possible ante-mortem data on the victim to aid in the identification process. With the victim's family, the police fill in the detailed form and complement it with photographs provided by the family and any data available from health and dental care authorities. Dental records play an important role in the identification process, as do operation scars, tattoos, etc.

A post-mortem form is then filled out on the as-yet unidentified victim with corresponding data on, for instance, distinguishing marks, clothing, or jewellery. The victim is fingerprinted and a DNA sample taken. If possible, a forensic autopsy is performed on the victim to obtain additional data.

Both the ante-mortem and post-mortem data are then handed over to the identification unit, which makes a comparison and, if necessary, tries to obtain additional data. As soon as the unit has established the victim's identity, the documents are transferred to a so-called identification board for a final review of the identification. The board consists of the police officer in charge of the investigation, the police officer in charge of victim identification, the forensic pathologist, and the forensic dentist. Once this board is convinced of the victim's identity, it issues a certificate allowing the forensic pathologist to sign the victim's death certificate and the police to grant permission for burial.

In addition, the Finnish DVI Unit employs a family contact person system; i.e., the sad news is delivered by a support person and a policeman with appropriate training for this assignment. The policeman is then appointed as the contact person for the family in question. All police communication with the family is handled through this contact person. The idea behind this system is that a close, personal relationship is created between the family and the contact person, which makes it easier for the family members to deal with the situation and may also prove useful in any criminal investigation, for example. The victims' families feel this makes an otherwise very difficult situation easier to bear.

2.4.7 The Internet and the media

The Internet was developed to distribute information, not to control it. This is the essence of the Internet, its power to do both good and evil. The online discussions admiring school killings, however, prompt some questions: Should there be more

effective supervision of what goes on by means of the Internet? What options are available for Internet services to prevent the distribution of certain kinds of material?

At the moment, there is no legislation governing Internet communities and discussion forums. As a consequence, the administrators of these are under no obligation to supervise the activities on their sites. Some communities do have clearly defined rules and codes of conduct and any breach of them is promptly dealt with, but many sites are still totally 'wild' in this respect. Although the number of postings on the Internet is immense, it is still possible to monitor them with the aid of efficient reporting systems. For example, YouTube employs a system that allows users to report a video as inappropriate. In this way, it is possible to moderate, relatively systematically, even a Net community as large as YouTube.

The activities that youngsters most often engage in on the Internet are playing games and chatting. Parents are aware of the dangers of the Internet but do not know how to act to prevent them. The situation is likely to become even more difficult, as mobile phones and palmtop computers provide instant access to the Internet and television programmes anywhere in the world. This makes it extremely important to develop youngsters' media skills and to increase their awareness of the downsides of the Internet. Parents will certainly have their hands full in teaching their offspring the rules and seeing that they are obeyed. Consistent, systematic, and age-specific media education in schools will also play an important role. In addition to knowing how to use different media effectively and safely, a child should be taught media literacy. This will enable the child to be selective, to focus on what is essential, and to take a critical view of what he or she sees and experiences.

It is utterly impossible to supervise and monitor all aspects of the Internet systematically and comprehensively. Instead, each Internet community should play an active role in determining what kind of media environment the Internet will turn out to be. Messages posted online are not protected by the confidentiality that is often associated with private communication. The problem here is how to report an illegal and threatening message to the police. Users should be encouraged to be alert and contact the administrator or, if necessary, the authorities when they see inappropriate material on the Internet.

In 2007, the Internet Watch Foundation received more than 30,000 reports of illegal material on the Net. According to a study published by this foundation, 77 per cent of the users who found such material did not know how to report it. Recently many authorities have attempted to encourage Internet users to act responsibly and report any misdemeanours. The Internet Watch Foundation recently launched a campaign to tell Internet users how to report inappropriate behaviour on the Net.

The European Union's Safer Internet Programme

In early 2009, the EU launched the Safer Internet Programme. This is the continuation of a programme implemented between 2005 and 2008 with a budget of more than €45 million. The EU started funding programmes for the safe use of the Internet in 1999. The aim is to increase safety on the Internet in many ways and especially to protect

children from the harmful effects it may have, as well as to increase the general public's knowledge of the Internet and promote its responsible use. Another aim is to develop a contact network to allow Internet users to report any illegal or inappropriate material by mobile phone or online.

Police tip line programmes

As their counterparts abroad do, the Finnish Police employ an Internet tip line to allow Internet users to report illegal or inappropriate material to the authorities or volunteer organisations. The Finnish Police Internet site provides dedicated shortcuts for this purpose, and it is possible to report an offence electronically there. The site also provides the Police Hotline number for phone tip-offs and the National Bureau of Investigation Web address for electronic tip-offs.

Even though the police make an effort to monitor the Internet, tip-offs from the general public are extremely important, because of the immense amount of material available.

The Save the Children Finland Tip Line

Save the Children Finland launched their tip line project in 2002 under the Safer Internet Programme of the European Commission. The aims of the project were to provide information, to increase awareness of illegal material on the Internet, and to establish a tip line for reporting it. The project was preceded by numerous enquiries from concerned citizens as to where they could report illegal material found on the Internet. Most were especially concerned about child abuse and child pornography.

The tip line is part of an international programme of the INHOPE Network, involving 33 organisations, in 29 countries. The network has made it possible for the authorities to send information on illegal Internet material to the country where it originated. Since 2008, the Finnish National Bureau of Investigation has received information on all illegal Internet material. Before that, only material that was somehow connected with Finland came to their attention.

Most tip-offs come via the Save the Children Web site. All tips are investigated and the relevant pages assessed as to their legality. By the end of 2007 (i.e., in approximately five years), 35,256 tip-offs were received, with 9,000 each in 2006 and 2007 alone. Roughly half of the tips were on material that was later found to be illegal. In recent years, the number of tips has varied between 500 and 1,000 a month.

What makes the removal of pages containing illegal material difficult is that the same material may exist simultaneously in several countries or can be accessed only occasionally. Furthermore, material that is illegal in one country may be legal in another.

Tip lines in Norway and France

In Norway, the Ministry of Justice and the National Criminal Investigation Service introduced the so-called Red Button System in September 2008. In this system, all discussion and community forums feature a red button that provides the user with a

direct link to a reporting form maintained by the police. The form makes it very easy for a user to report any illegal material on the Internet, such as racism or child pornography. As the button is on the same page as the illegal material, it considerably lowers the threshold for reporting it. Naturally, the button also acts as a deterrent. Even if the users of an Internet site cannot be held responsible for any illegal and inappropriate material it contains, the red button provides them with a means to monitor the contents of the site. In Norway, the red button was first employed in Internet Messenger, but any site can now ask for one to be featured. The same system is in use in the United Kingdom and Australia.

To aid in their fight against paedophiles, the French police have been employing their own reporting system for almost a year now. Even though the tip line has not received much publicity, the police still get approximately 1,000 reports a month, with, on average, 20 of these leading to criminal investigation each month.

The red button has its critics, however. Not all Web site administrators want their carefully designed sites blemished by these ugly buttons, and some are concerned about false denunciations. The Finnish organisation EFFI (Electronic Frontier Finland) is involved in an international campaign called 'Freedom, not Fear', in protest against what they consider excessive control of the Internet. They feel that interactive Internet sites, forums, and 'blogs' should be protected from the self-censorship brought about by inadequate legislation.

2.5 Rules, regulations, instructions, and other documents

2.5.1 Instructions concerning the degree of preparedness and prevention in schools and on student welfare authorities

Rules and regulations pertaining to non-graded upper secondary schools

After numerous experiments, Finland introduced the non-graded upper secondary school system in 1994. This was provided for in the 1993 amendment to the general Upper Secondary Schools Act. Implementation of the non-graded system was voluntary, but practically all upper secondary schools made the transition between 1994 and 1996.

According to current upper secondary school legislation, the curriculum is planned for three years of study but can be completed in anything between two and four years. Students are not moved annually from one grade to another as in the traditional system; instead, students plan their curricula themselves. The curriculum consists of courses with an average of 38 hours of teaching in each. The students also receive guidance counselling. According to the Decree on Upper Secondary Schools, 75 courses, at minimum, are required for graduation from upper secondary school. According to a study commissioned in 2005 by the National Board of Education, the average number of courses taken by students who graduated in 2003–2004 was at most schools between 76 and 79.

Instead of terms, the school year is divided into five or six periods, each of them normally ending with a test week. The student selects the courses he or she wants to study in each period from a so-called course chart, which lists all courses offered by the school during the school year. A student may include in his or her curriculum courses from other educational institutions co-operating with the school. Some courses may be completed independently with no contact teaching involved.

For every school year, each upper secondary school draws up a plan indicating how teaching will be organised in practice. All schools also draw up their own curriculum in accordance with the National Core Curriculum, published by the National Board of Education.

Because of the students' individual course selections, the composition of the study group is never constant and the same group may include students of various ages. If a student receives a failing mark in several courses for any one subject, he or she has to retake one or more of the courses before being allowed to proceed to further studies in that subject.

Instead of traditional classes, the students are divided into so-called base study groups with one of the teachers as their tutor. The tutor monitors the progress of the students in his or her group and keeps them informed of current school issues related to their studies.

Depending on the local circumstances and available resources, the non-graded system is realised differently in different schools. For instance, in a small upper secondary school with few optional courses available, the non-graded system may in practice resemble a traditional graded one in many respects.

According to a 2005 study by the National Board of Education on non-graded upper secondary schools, 93 per cent of student associations and 72 per cent of head teachers wanted to continue in a non-graded system instead of returning to a graded one.

Pupil and student welfare at educational institutions

Pupil and student welfare is defined as action promoting and maintaining good learning, good mental and physical health and social well-being, and conditions conducive to these. Pupil and student welfare is the responsibility of all who work at the school or educational institution. It is their duty to promote an atmosphere of caring, positive interaction, and support within the school community. Active co-operation with parents is also an essential element in pupil and student welfare.

Pupil welfare is provided for in the Basic Education Act, Section 31 a, according to which a pupil is entitled to free pupil welfare necessary for participation in education. Pupil welfare is also provided for in the Primary Health Care Act. Pupil welfare consists of basic pupil welfare work in accordance with the curriculum approved by the authority responsible for the organisation of the education, and of pupil welfare services – i.e., the School Health Service referred to in the Primary Health Care Act and educational support as referred to in the Child Welfare Act, which includes the services offered by the education welfare officer and school psychologist. Referring a student for

health care and social welfare services is provided for in the Upper Secondary Schools Act and the Vocational Education and Training Act.

An amendment in 2003 gave the National Board of Education, for the first time, the power to lay down the key principles of pupil and student welfare as well as their aims in the National Core Curriculum. According to the amendment, the main student welfare task is to provide a child or youngster with the prerequisites for learning – i.e., promoting his or her general well-being. Pupil and student welfare work provides both individual and communal support. In individual support, the pupil or student's safety and well-being are of primary importance. It is also essential to identify any learning or other problems as early as possible so that the pupil or student can receive the necessary support. In upper secondary education, this usually means referring the student to an authority capable of providing the necessary care.

As regards prevention and early intervention, it is important for the school curriculum to include a description of the measures and personnel necessary to prevent, identify, and deal with various problems and crisis situations. At all school levels, these include bullying, violent behaviour, accidents, and the death of a student or staff member. Further problems or crisis situations in basic, upper secondary, and vocational education are mental health issues, smoking, and the use of intoxicants. Schools providing basic education are also under obligation to draw up a plan to monitor student absence.

The National Core Curriculum emphasises the multidisciplinary nature of pupil and student welfare and states that the responsibility for looking after the students' well-being and caring for them belongs to all staff working at the school as well as to the authorities in charge of student welfare services.

The teachers are in a key position to promote an atmosphere of positive communality. This means, for instance, creating a positive and open learning environment, promoting conditions conducive to student well-being, and employing early identification and intervention as guiding principles in problem and crisis prevention. On a more specific level, teachers are responsible for maintaining discipline during lessons, monitoring recess, and generally looking after the safety of the students and staff. Promoting cooperation between school and parents is also an important part of teachers' duties. This is provided for both in legislation and in the National Core Curriculum.

Pupil and student welfare work in schools and other educational institutions is coordinated by pupil or student welfare teams, whose mission is to look after the safety and well-being of the community. The authority in charge of organising the education or training is obliged to draw up a curriculum in co-operation with municipal social welfare and health authorities. The authority organising the education decides how pupil or student welfare is to be organised – whether there will be pupil or student welfare teams in the municipality and what their duties are, who the members are, and how often they will meet. The duties of a pupil or student welfare team generally include:

- 1. to act as an expert in development of a healthy and safe learning environment and monitoring it
- 2. to support the individual pupil or student's learning, healthy growth, and development

- 3. to monitor and evaluate the individual student's need for physical, psychological, or social help and support
- 4. to monitor and evaluate the need for communal support in the school community

There are no statutes governing pupil or student welfare records. Accordingly, there is a lot of variation in how pupil welfare is organised and records kept. In pupil welfare work, it is important to draw a distinction between general issues related to the well-being of the school community, on the one hand, and issues concerning a single pupil, on the other, as the latter are governed by the Act on the Openness of Government Activities and the confidentiality regulations of various administrative sectors.

A typical comprehensive school's pupil welfare team consists of the head teacher or deputy head, a guidance counsellor, an education welfare officer, a special-needs teacher, a psychologist, a school nurse, and possibly a doctor. As no special-needs education is offered in upper secondary education, there is seldom a special needs-teacher in an upper secondary school's student welfare team. Likewise, only a handful of education welfare officers and psychologists, and even fewer doctors, are available for student welfare work at the upper secondary school level. On account of the limited resources, it is possible to discuss only general issues concerning the well-being of the school community in a pupil or student welfare team. Because of confidentiality statutes, only those who have an interest in the matter may participate in handling issues affecting an individual pupil or student.

Data privacy in relation to pupil welfare

Statutes governing data protection and the transfer of confidential information by professionals participating in pupil welfare work are set forth in educational, social, special health-care, and general legislation. The statutes are scattered among various acts and decrees and drawn up differently for various professions, and they do not form a comprehensive, coherent, and easily identifiable entity. Seeming to cause the most problems are the obligation to transfer confidential information and the right of access to it.

According to the Act on the Openness of Government Activities, a student's personal data may only be transferred with the student's and his or her legal representative's consent. Situations in which a student's confidential information may be transferred without consent are not specified in current legislation. By law, only data necessary for organising education in an appropriate manner may be transferred without consent. However, as current legislation does not specify what constitutes such necessary data, this leaves the issue open to interpretation, which is bound to lead to problematic situations.

The working group studying the reform of legislation governing student welfare recommended in 2006 that the legislation be amended in two ways: First, the following personnel immediately involved in dealing with a student's affairs should be allowed to participate in student welfare work: all personnel involved in organising the student's education, the school nurse, the school doctor, the school psychologist, and the education welfare officer. Second, the working group recommended that, regardless of

confidentiality statutes, those participating in student welfare work should, even without the consent of the student or guardian, be allowed to transfer the necessary confidential data to each other and to the authority in charge of organising the student's education.

Early on, in 2002, the Parliamentary Education and Culture Committee suggested in a report that the legislation governing the handling of personal data and data protection be amended to facilitate the organisation of student welfare services in the interest of the pupil or student. Amendment of the current legislation would be important from the student welfare personnel's point of view as well.

Protection of pupils and students from violence, bullying, and harassment

According to the Basic Education Act and the Upper Secondary Schools Act, all pupils and students shall be provided with a safe and healthy learning environment. The safety of the school staff is provided for in the Occupational Safety and Health Act.

The authority responsible for organising the education or training shall include in the curriculum a plan indicating how pupils and students are protected from violence, bullying, and harassment and shall implement it and supervise its application and implementation.

According to the National Core Curriculum, the objectives and key principles of student welfare in a basic-education curriculum are as follows:

- 1. activities to promote health, well-being, security, social responsibility, and interaction in the school community
- 2. general pupil welfare support; guidance and counselling; and support for the child or young person's physical, psychological, and social development
- 3. co-operation in formulating and monitoring the learning plan or individualised education plan (IEP), and in planning further studies
- 4. pupil welfare actions offered to a pupil encountering various difficulties and offered in connection with disciplinary punishment or when that pupil has been suspended
- 5. co-operation between pupil welfare personnel and the home, the school, pupil welfare experts or other experts, and local support networks
- 6. measures, and the associated distribution of labour and responsibility, aimed at the prevention, observation, or taking care of the following problem and crisis situations: monitoring of absences; bullying, violence, and harassment; mental health issues; smoking, alcohol use, and drug abuse, as well as the use of other intoxicating substances; and various accidents, misfortunes, and types of death
- 7. implementation of objectives established for general safety in transport to and from school
- 8. objectives for health and nutrition education and the teaching of manners in conjunction with the provision of school meals

The guides on school health care and student health care also provide information on bullying. Bullying is defined as the systematic misuse of power or force and is characterised by intentionality, repeatedness, and imbalance in power between the two key parties involved. It may be psychological or verbal in nature but may also involve

73

the use of physical violence. It is paramount to intervene as soon as the first symptoms are visible. The best way to combat bullying is prevention - i.e., maintaining a positive atmosphere, promoting communality, and providing responsible leadership. It is also important that every member of the school community know what to do if bullying occurs.

The Parliamentary Education and Culture Committee commented on bullying in their report (10/2008 vp) on the prevention of young people's marginalisation and encouragement of communality. According to the report, it is extremely important to identify all cases of bullying as soon as possible and to intervene in a manner that results in the cessation of bullying. The committee goes on to say that it is even more important to bring about a change in the social structure – i.e., the relationships between students. The students should also realise that the school community can play an important role in the prevention of bullying instead of creating circumstances favourable for it. The prevention of bullying should be the common objective of the whole multi-profession school community. With their special skills, the teachers are in a key position to steer the school away from an atmosphere conducive to bullying.

The School Health Service and Student Health Service

School health service in comprehensive school is provided for in the Primary Health Care Act's Section 14, Subsection 5. According to this act, a municipality must provide the students with school health-care services, including the oversight and promotion of the health and safety of the school community. In co-operation with other pupil welfare personnel and the teachers, School Health Service authorities are responsible for the health of the pupils.

School health-care authorities used to provide health-care services for upper secondary schools as well, but from the 2007–2008 school year onward, these services have been provided via the student health-care services referred to in Section 14, Subsection 6 of said act. According to this subsection, a municipality is under obligation to provide the students in its educational institutions with student health-care services, regardless of their place of residence. This includes the promotion of a healthy and safe learning environment, promotion of the students' health and ability to study, health-care and medical services, mental health services, and general promotion of the well-being of the community. Detailed information on the organisation of school and student health care is provided by the guides published by the Ministry of Social Affairs and Health and the National Research and Development Centre for Welfare and Health (STAKES)³.

The purpose of school and student health service is to support schools in providing the students with optimal conditions for good health and learning and to pay special attention to students whose conditions are less than average. Another objective is to identify as early as possible the signs of unfavourable development in a child, an

Stakes, Guides 51:2002, School Health Service. Ministry of Social Affairs and Health Publications 2006:12, Student Health Service. Ministry of Social Affairs and Health Guides 2004:8, School Health Service Quality Recommendations.

adolescent, the family, and their environment as well as to intervene as early as possible.

In addition to identifying a student's or community's problems, early intervention aims at finding solutions as early as possible. It is extremely important in intervention to offer the student support and co-operation without forgetting to support his or her own resources. Preventive work and measures conducive to well-being are also needed. The multidisciplinary co-operation in pupil and student health service makes early intervention easier.

Early intervention is one of the objectives outlined in the Ministry of Education Development Plan for Education and Research 2003–2008. To reach this objective, the ministry intends to provide more funding for special-needs and remedial teaching as well as for pupil and student welfare services.

School Health Service and Student Health Service personnel

In the School Health Service, the recommended number of school nurses is a maximum of one for every 600 pupils. For school doctors, the recommendation is one working day a week for every 500 students or 2,100 pupils for every full-time doctor.

It is also recommended that every pupil have a minimum of three in-depth medical examinations during comprehensive school. In the intervening years, there should be an annual medical check performed by the school nurse. As regards Student Health Service, a nurse's medical check is recommended for all students in their first year, followed by a medical examination during the first or second year. Students must be provided with the opportunity to see the nurse or doctor at other times as well if necessary. For this, they usually need to make an appointment.

According to the Ministry of Social Affairs and Health guide, in upper secondary school the recommended number of nurses is one full-time nurse for every 600–800 students.

This number is, of course, just computed as a guide, and the ratio should be lower if the nurse works in more than one school, a school psychologist is not available, a functional mental health service network is not available, or a school doctor is not available. Likewise, the ratio is lower if many young people in the student population are in danger of being marginalised or otherwise require special attention. For school doctors, the recommendation is 2,500–3,000 pupils for every full-time doctor. No official recommendations are available for education welfare officers and school psychologists, but the Child Welfare Act of 1990 suggests one for every 1,000 students.

According to the Ministry of Social Affairs and Health and the National Research and Development Centre for Welfare and Health studies, the municipal resources for school and student health services do not match the standards and recommendations laid down for them. In addition, there is a lot of variation in how school and student health services are run in different parts of Finland. This leads to inequality; depending on the municipality they live in, children and adolescents do not receive the same standard of care everywhere.

Mental health services

According to the Student Health Service guide, psychological symptoms, mental disorders, and self-injurious behaviour are some of the special health problems faced by students. It is well known that mental health problems are all too common. Early intervention is crucial for preventing the problems from becoming worse or prolonged. This is why Student Health Service personnel need to be prepared to listen to the patient and pay adequate attention to his or her problems so that any underlying psychosocial problems can be identified.

75

Student Health Service personnel should also encourage students to develop their life skills and to be able to identify typical stress symptoms, such as sleeping problems, tiredness, lowered concentration, and psychosomatic symptoms. Stressful situations that may contribute to the development of depression include various types of loss, prolonged family conflicts, school bullying, other psychiatric or somatic disorders, and learning difficulties.

The Student Health Service is capable of treating mild mental disorders. Alongside Student Health Service personnel, the school nurse and doctor can provide the student with the necessary care to maintain his or her ability to study. Treating mental disorders requires multidisciplinary co-operation involving the entire school and municipality network. To function efficiently, the Student Health Service must have a plan jointly drawn up by all authorities participating in mental health care.

There are two kinds of psychologists in the Student Health Service. Health-care psychologists concentrate on the treatment and prevention of mental disorders, while study psychologists focus more on learning and study problems. Minors with serious mental disorders are referred to Adolescent Psychiatry Services. Young adults suffering from serious mental disorders are referred to Mental Health Centre facilities and psychiatric hospitals.

On the basis of the symptoms and the patient's ability to function, basic health-care authorities identify the disorder and refer the patient to specialised health care when necessary. According to the Primary Care Act and the Act on Specialised Medical Care's statutes governing care guarantees, the necessary care in children's and adolescents' mental health services must be provided within three months Assessment of a patient's health-care needs, however, must be performed within three weeks of the referral.

In September 2006, the Ministry of Social Affairs and Health sent all medical directors a questionnaire on children's and adolescents' access to specialised psychiatric care. This was at around the time the perpetrator visited a doctor for his mental health problems. Because of, for instance, deficiencies in hospitals' data systems, the results were not representative. Still, of 20 hospital districts, only five reported being able to provide the necessary care and treatment for children within the required time frame. According to the survey, on 16 October 2006, there were 215 adolescents who could not be offered the necessary ambulatory or ward care within three months. The answers received could not be deemed representative, and the actual figure is likely to be even

higher. According to patient records, 15,419 patients in total were treated in adolescent psychiatry clinics in 2005. At that time, adolescents who had been on the waiting lists for more than three months numbered 460.

Promotion of communality in upper secondary education

In recent years, upper secondary education has focused on promoting positive communality in various ways. The National Core Curriculum provides a foundation for this. There are various ways to promote communality, such as student associations, student tutors, guidance counselling provided by the tutor, and promotion of team spirit and communality through school events. The groundwork for communality is laid in everyday interaction, during recess, on excursions, and in lessons. Awareness of the importance of communality and the positive attitude of the students and staff form a prerequisite for successful creation of an atmosphere of communality.

The status of pupil and student welfare in schools and educational institutions was significantly improved by the amendments to school legislation in 2003 and the reformed National Core Curriculum. The objective of student welfare is to create a safe and pleasant learning environment with the help of individual and communal support.

Guidance counselling provides support for the students in their upper secondary school studies as well as in situations where they have to make important choices or decisions or are faced with problems in their personal lives. The student's individual needs always are the starting point for guidance counselling. The aim is to guide and support the students in handling various issues in their personal lives as well. Developing a spirit of communality in the students is, likewise, one of the aims of counselling in upper secondary school. An upper secondary school curriculum must include a plan for how guidance counselling is organised and assessed. The people in charge of counselling, and their individual tasks and responsibilities, must also be specified in the plan.

Several cross-curricular themes, such as active citizenship and welfare and safety, are included in the National Core Curriculum, which facilitates the development and creation of a communal atmosphere. In practical terms, cross-curricular themes are policies that structure the upper secondary school's operational culture and priority areas that span subject boundaries and integrate education. The work methods and activities and, in a wider sense, the operational culture of the school play an important role in promoting communality.

According to the Upper Secondary Schools Act, each educational institution shall have a student association. Its objective is to promote co-operation between students and to support their learning process. As members of the school community, the students can have an impact on school activities in many ways. The aim is to provide every upper secondary school with a structural framework that promotes the students' active participation in school matters as well as in society generally. To develop student associations and a communal operational culture in schools and other educational institutions, the Ministry of Education launched a project that concluded in 2007, emphasising student participation in creation of a communal atmosphere in schools.

Schoolmates provide a student with much-needed peer support in upper secondary school. Student tutors make it easier for a student to become integrated into the school community and also promote a positive operational culture. The student tutors are senior students with a so-called tutor liaison teacher co-ordinating their activities.

An important facet of student support is the guidance counselling provided by the tutor teacher. In most educational institutions, it is commonplace for the tutor to personally interview all students in his or her group annually and thus learn to know them better. In addition to promoting team spirit in this group, the tutor constantly monitors the progress of the students in the group. Tutors also participate in the planning and organisation of various events promoting communality, such as team spirit days, excursions, and a broad range of theme days. The purpose of these events is to help the students to know each other better, to promote student interaction, and generally to develop school activities.

Several educational institutions organise various well-being- and study-atmosphererelated surveys, events, and development activities on a regular basis. In autumn 2008, the National Board of Education started publishing material on their Edu.fi Web site to support the promotion of communality in educational institutions.

The municipal emergency plan

According to the Emergency Powers Act, a municipality is under obligation to have an emergency plan. This may include the emergency plans of various administrative sectors as appendices. Municipal school authorities have received training from State Provincial Offices in preparation of educational administration emergency plans.

To facilitate the drawing up of educational administration emergency plans, the National Board of Education, by order of the Ministry of Education, laid down in early 2007 a plan addressing how to organise education in exceptional circumstances. The plan deals with special situations outlined in the Decision in Principle of the Council of State of 23 November 2006 called 'The Strategy for Securing the Functions Vital to Society' ('YETTS' in Finnish). The plan has been utilised in providing training for education authorities in the preparation of an emergency plan. The plan is to be divided into three main sections:

- 1. the general principles concerning preparedness and management of special situations
- 2. the effect of threat scenarios on educational administration and performance of the vital functions
- 3. maintaining and updating the co-operation plans and drills

School rescue plans

According to the Rescue Act, schools, as well as youth, sports, and cultural services entities, are obliged to draw up a rescue plan. Regional rescue authorities are responsible for supervising this. A detailed list of buildings for which a rescue plan shall be drawn up is laid down in the Government Decree on Rescue Services, which also provides an outline of the contents of the plan, to cover potential hazards and dangerous

situations, the general fire safety of the building and its safe use, measures to be taken to remove potential hazards and prevent dangerous situations, emergency exits and public shelter space, and the organisation of fire-fighting and rescue assignments. The plan shall also include training of safety personnel and orientation for other personnel.

2.5.2 Instructions concerning police preparedness and prevention

The main statutes governing police activities are the Police Act, the Criminal Investigations Act, and the Coercive Measures Act. According to the Police Act, the duty of the police is to secure judicial and social order, maintain public order and security, prevent and investigate crimes, and forward cases to a prosecutor for consideration of charges. The Criminal Investigations Act and the Coercive Measures Act regulate criminal investigation and the coercive measures used therein. The Police Act also vests the police with certain powers to obtain information in order to prevent, reveal, or interrupt a criminal act. Assistance and co-operation between authorities are provided for in several acts.

Police activities are governed by numerous instructions and orders laid down by Supreme Police Command, some of them classified. For example, operational police activities are regulated by instructions and orders concerning preparedness, management of operations, police tactics, and the use of force. There are special instructions and plans for demanding and special situations, as well as exceptional circumstances, with due consideration to co-operation between authorities. For preventive police work, the key document is the Strategy on Community Policing, which is implemented through means such as performance interviews.

The Decree on Police Administration dictates that local police administration is to be organised such that a Provincial Police Command area shall include one or several districts. One of the duties of a Provincial Police Command facility is to ensure the availability and quality of police services in its operational area. The quality of police services is appraised and monitored through performance interviews, for example. At county level, police activities are supervised by provincial police commands, whereas Supreme Police Command is responsible for this task on the national level.

The Decree on Police Administration also addresses the duties of police units. Local police shall 1) maintain public order and security, 2) prevent crime, 3) investigate criminal or any other acts endangering public order or security, 4) control and supervise traffic and promote traffic safety, and 5) perform all other tasks prescribed in the law.

The ability of the police to prevent incidents like the Jokela school shooting

The powers of the police are mainly provided for in the Police Act, the Criminal Investigations Act, and the Coercive Measures Act. The powers of the police are extended only if a criminal act has been committed or if there is an immediate threat of such an act. A criminal investigation cannot be initiated unless there is reason to believe a criminal act has been committed; i.e., the act has to constitute a crime as defined in the Penal Code.

As a rule, preparing to commit a criminal act is not punishable by law, but there are some exceptions to this. For instance, preparing or planning to commit an offence against life is not punishable under criminal law. If the police learn of a plan to commit an offence against life, they will try to prevent it by all means at their disposal, but the use of coercive measures employed in criminal investigation is not possible. Furthermore, even if the police manage to prevent the criminal act in this case, the perpetrator cannot be brought to justice.

In crime prevention, the police use the powers granted to them by the Police Act. For example, according to Section 20 of the Police Act, police officers have the right to remove a person if, on the basis of the person's threats or general behaviour, it can be concluded that he or she would be likely to commit, for instance, an offence against life. The apprehended person may be kept in custody only as long as it is likely that he or she would commit an offence against life, but this period may not exceed 24 hours from the time of apprehension. After this time has elapsed, the person must be released.

The police may also refer someone clearly in need of help to psychosocial services, which may sometimes be the most effective solution. The decision concerning the necessary care for the person, such as outpatient care, medication, or coercive care, is always made by a doctor.

In the same way as an illegal threat, raising a false alarm, or malicious damage, a threat against a school can be construed as a criminal act punishable under criminal law. A criminal investigation is launched to bring the perpetrator to justice as soon as the police learn of the criminal act. After the criminal investigation is completed, consideration of charges follows. With threats, the police employ a policy of zero tolerance.

Not all inappropriate messages or data on the Internet constitute a criminal act, and a criminal investigation therefore cannot be launched. As a consequence, the police cannot necessarily employ such means of gathering information as are referred to in the Police Act. If the police, however, learn of a threat, they use other means at their disposal to look into the matter, such as talking to the person in question. If the threat does not constitute a criminal act, the options of the police for establishing the identity of a person planning a crime on the Internet are limited. The police possess only limited powers to participate in online discussions or to log in anonymously to an Internet forum. Still, through educational work the police may prevent a number of adolescents from unwittingly committing a crime in a discussion forum, a crime that may also result in considerable tort liability.

Police PR policy

Police PR policy is outlined in the Ministry of the Interior's Regulation on Public Relations and its appendix. The new PR policy is in accordance with the right-of-access principle and aims to bring a new kind of openness to police activities, which makes it easier for citizens to trust the police. The importance of trust is highlighted in demanding and special situations and in exceptional circumstances. As people feel threatened in such circumstances, their need for reliable information increases significantly. Then it is paramount that the police provide the necessary information

quickly and efficiently. In demanding and special situations, the public must be informed as soon as this is possible and the situation is under control. However, as police activities often involve criminal activity or an act endangering public order and security, the reliability and truthfulness of the information must be checked carefully before its release. Informing the public as early as possible must not come at the cost of reliability.

In demanding situations, informing the media and the public may become a critical point in police activities. As a rule, in a special situation involving various authorities, the responsibility for informing the media and the public lies with the authority in charge of the whole operation. Each authority, however, will inform the media of its own activities. In a situation involving hostages, a siege, an accident, or a natural disaster, representatives of the media often try to get stories and pictures before everybody else. It is the duty of the police to maintain general security and to protect the privacy of the victims of a crime or accident and their families.

Unless the situation commander decides otherwise, the field commander is responsible for media liaison work in routine police activities. The Criminal Investigations Act provides for media contact during a criminal investigation, during which only the head of investigation may publish situation reports. In demanding and special situations, media contact is handled by the field organisation. In the Jokela incident of 7 November 2007, Situation Command assumed responsibility for this work as soon as the field organisation was established.

2.5.3 Instructions on Emergency Medical Services preparedness and prevention work

According to the Primary Care Act, a municipality is obliged to provide ambulance services for its citizens. These services are referred to as Emergency Medical Services below. The services may be arranged in a number of ways: the municipality either provides the services itself or jointly with another municipality or may choose to obtain the services from a private enterprise. According to the Ambulance Service Decree, in emergency medical care the ambulance services are either basic-level or paramedic-level. The basic-level personnel consist of ambulance-drivers with practical nurse or rescuer training, while paramedic-level personnel usually have a degree from a university of applied sciences. In situations involving multiple patients, it is common for the paramedic arriving in the first paramedic-level ambulance at the scene to assume medical command as the medical chief. As the emergency medical care doctor arrives on the scene, he or she decides, depending on the extent and nature of the situation, whether to assume the duties of medical chief or not. In the latter case, the paramedic will continue in the capacity of medical chief.

According to the Emergency Response Centre Act, each authority is responsible for the response arrangements in its sector and instructs the Emergency Response Centre as to which units are to be alerted in each situation.

2.5.4 Instructions concerning Rescue Services preparedness and prevention

Rescue Department

According to the Rescue Act, municipal Rescue Services instances are responsible for rescue services in their area. The Rescue Services service level must be commensurate with the potential threats and hazards in the area. Also, exceptional circumstances must be taken into account in determination of the service level. Before the decision concerning the service level is made, the Rescue Services authorities must consult the municipal authorities. The decision shall include the potential threats and hazards in the area as well as the available resources. An outline of the service level available for accident prevention, rescue activities, and civil defence shall be presented also, as should a plan for their development. Rescue services must be planned and implemented such that in accidents and hazard situations the necessary measures can be taken efficiently and without delay.

A rescue department with full-time personnel is responsible for rescue services in the Rescue Services area. Part-time personnel may be employed, if necessary. The Rescue Services organisation may also include volunteer fire brigades and industrial fire departments.

Emergency Response Centres

Each authority involved in Emergency Response Centre activities provides the centre with the necessary instructions concerning its field of activities. The ERC also performs tasks ordered by other authorities performing specific assignments.

The duties of the ERC are: to receive emergency calls and other calls requiring immediate police action; to receive calls related to the security of persons, property, and the environment and requiring immediate action; and to relay these calls to units that, according to current legislation, are responsible for responding to them. The ERC also acts as a communications centre for rescue, police, social, and health authorities; supports and assists these authorities' units in their assignments; and performs any other tasks required by law.

Rescue plans

A list of buildings for which, on account of a personal safety hazard, a fire hazard, or an environmental hazard, a rescue plan shall be drawn up is laid down in the Government Decree on Rescue Services. The Jokela School Centre is such a building.

The Rescue Plan shall cover potential hazards and their effects; measures to be taken to eliminate the hazards; the location of emergency exits and the public shelter; the organisation of fire-fighting and rescue assignments; safety personnel and training; orientation of the staff; the necessary rescue equipment, such as fire-extinguishing equipment, rescue equipment, personal protective devices, and first-aid equipment commensurate with the potential hazards; instructions for dealing with potential accidents and hazards; and details of how the information included in the plan is to be distributed.

The Rescue Plan must include an account of how reduced capabilities of people in the building are taken into account in preparation for potential hazards. Any changes caused by exceptional use of the building must also be taken into account in the plan.

2.5.5 Legislation governing youth work

Finnish legislation on youth work has been in existence since 1972, with the new Youth Act passed in 2006. The purpose of the act is to support the growth and independence of adolescents, to promote active citizenship, to provide adolescents with better social skills, and to improve their living conditions.

The authority responsible for youth work and policy is the Ministry of Education. The State Provincial Offices implement it on a regional level. Youth work and policy on a local level is the responsibility of municipal authorities. In practice, this work is performed by municipal authorities, youth clubs, and other organisation involved in youth work. The Youth Policy Development Programme, to be issued by the government every four years, was described in the new Youth Act. The programme is prepared under the Ministry of Education.

In the Youth Act, municipal duties are defined as goal-directed basic services implemented independently by municipalities. Local and multidisciplinary co-operation is emphasised also. The Youth Act is, first and foremost, a financing law, which provides for the support systems for youth work and policy.

According to the Youth Act, youth work encompasses educational guidance for young people; youth facilities; information services; support for youth clubs and other youth organisations; sports and cultural, international, and multicultural youth activities; environmental education; and, if necessary, workshops and other suitable local activities. By law, young people must be provided with the opportunity to participate in decisions concerning regional and local youth work and policy. They also have the right to be heard on matters that concern them.

2.5.6 Firearms legislation

A firearms legislation reform that is in accordance with EU legislation and international treaties became effective in 1998. Accordingly, the Firearms Act also went through a partial revision. According to the Firearms Act, any activity involving firearms and cartridges is subject to authorisation. The same applies to the acquisition and possession of firearm components and certain types of ammunition. Likewise, the trade, manufacture, repair, and conversion of firearms and their components for a commercial purpose are also subject to authorisation. The authority granting a permit is instructed to do so only if the weapon is suitable for the purpose cited by the applicant and is not unnecessarily powerful or efficient.

According to the Ministry of the Interior's regulation on firearms (SM-2006-02043/Tu-51), one of the key principles in public administration is that of trust. Provided that certain conditions are met, the citizens are entitled to acquire and possess firearms. A person applying for a permit must present the authorities with all of the information

needed for a decision on the application. The required information typically concerns the purpose of acquiring the weapon. The authority granting the permit is under obligation to determine whether the general and special preconditions laid down in the Firearms Act are met and the permit can be granted. Conversely, if a permit-holder no longer meets the criteria for holding a possession permit, the revocation process is initiated; if the conditions for revocation laid down in the Firearms Act are met, the permit shall be revoked. As a rule, if a permit is not granted, the applicant or permit-holder shall, in accordance with the Administrative Procedure Act, be heard before a final decision is made. The police may also conduct an investigation related to the revocation of a licence or a permit. In recent years, the number of possession permits revoked annually has been between 500 and 1,000. The revocations concerned 200–400 people. There was considerable variation between police districts in the number of revocations.

For granting of permits and licences referred to in the Firearms Act, a general condition must be met. According to the Firearms Act, a permit or licence may be granted if there is acceptable reason for granting the licence or permit and if there is no reason to suspect misuse of the licence or permit or of the objects acquired or possessed under it. Suspicion shall be based on a concrete fact that may relate to the applicant, his or her personal traits or circumstances, the weapon, or any circumstance related to it. A permit or licence shall be granted if all of the special provisions laid down in the Firearms Act are met, acceptable grounds for the permit or licence have been presented, and the weapon is suitable for the use specified in the application. The authority cannot proceed from the assumption that the applicant intends to misuse the weapon.

The materials used as a guide in preparation of the Firearms Act state that there is always the risk of a person in possession of a firearm misusing it. A firearm may also end up in the wrong hands through a criminal act. Thus it has been established that, due to the general and well-known qualities of firearms, the risk of misuse does exist. Without any concrete facts to prove it, this risk cannot be taken as the primary assumption either in consideration of an application for a permit or licence.

According to the Firearms Act, an acquisition permit for a firearm is granted or revoked by the police department of the applicant's municipality of residence. Normally the application is delivered to the police department in person. After the applicant has acquired a firearm under an acquisition permit, he or she shall apply for a possession permit within 30 days of the acquisition. When one is applying for a possession permit, the firearm or component thereof shall be presented to the police.

To acquire and possess a firearm or firearm component, the applicant must present an approved purpose for the firearm. An acquisition permit may be granted for the following purposes: shooting of animals permitted by hunting legislation; target shooting or practice; work in which a weapon is necessary; a show, filming, or a corresponding presentation; keeping in a museum or collection; keeping as a souvenir; and signalling.

According to the Ministry of the Interior's regulation on firearms, the risk high-power weapons pose to public order and security is greater than that of non-lethal weapons.

Accordingly, the more powerful the weapon, the more careful the consideration for granting a permit should be.

An acquisition permit may be granted to a person who has reached the age of 18 and who, on the basis of his or her state of health and behaviour, is to be deemed suitable for handling firearms and firearm components. With the consent of his or her parents or guardians, a permit may be granted to a person who has reached the age of 15 and otherwise fulfils the requirements of an acquisition permit applicant. For example, a criminal past or substance abuse may result in the rejection of an application. According to the Firearms Act, suitability of the applicant refers to overall evaluation of his or her health and behaviour. Thus, the behaviour and way of life of the applicant shall be evaluated on the basis of both his or her past and present behaviour. The permit authority shall utilise the necessary register information, which in this case means police records and criminal records.

If necessary, the permit authority should request the applicant to present a medical certificate, but in practice this is very rare. In accordance with the Police Act, when assessing the continued validity of a firearms permit, the police have the right, on making a justified request, to obtain information on the licence-holder's state of health, use of intoxicants, or violent behaviour, notwithstanding the obligation to observe secrecy, if there are any reasons to suspect that the licence-holder no longer meets the conditions set for obtaining a permit. Mental health problems are usually brought to the attention of the permit authority only when the police have been forced to intervene in a person's behaviour due to such problems. In consideration of an application, any mental health problems revealed in the process and their effect on the person's suitability shall be taken into account before a decision is made. Only police reports and, if necessary, a medical certificate attesting to the applicant's state of health are to be used in the decision-making process.

According to the Firearms Act, the application for a firearm shall be delivered to the police department in person. Under a current government proposal, it is paramount that the applicant present himself or herself in person to the permit authority so that the applicant's personal qualities may be assessed. The idea under the proposal is that, as a rule, the permit authority meet the applicant in person. In practice, this is not always adhered to in all police departments. The instructions concerning delegation should, however, aim at the applicant meeting the permit authority in person if possible. For practical reasons, it sometimes happens that the person who received the permit application interviews the applicant and then fills in his or her observations in the 'Observations' field of the application form. The person making the decision can then use this information in the decision-making process. All firearm permit applicants are interviewed to some extent when they deliver their application.

2.5.7 Government communications in crisis situations and exceptional circumstances

In September 2007, the Prime Minister's Office published new instructions for communications in crisis situations and exceptional circumstances. The need for new instructions arose after the tsunami disaster in Asia in 2004. These instructions replaced

the Media Liaison Instruction (2002) and the Communications Recommendation (2003).

The new instructions emphasise the reliability, speed, and interactive nature of communications as well as the importance of the co-ordination of communications throughout the public administration sector. Interactive communication is based on openness and reciprocity. According to the instructions, the authorities must be able to meet the increasing demand for information by the citizens, the media, and other key co-operation partners and to keep them informed of the prevailing situation and its developments. According to the instructions, communication is an integral part of crisis management and is always situation-specific.

The instructions highlight the responsibility of each authority for communications in its sector and preparedness for crisis communications. Also, the importance of research and that of co-operation, as well as crisis communications drills and training, are emphasised.

The instructions include an outline of the management and communications at Council of State and other levels of authority. Local authorities act according to their instructions. The authority in charge of a situation is also responsible for all communications involved, and for informing other authorities and interest groups. The other authorities provide support to the authority in charge of communications. The various authorities must also keep the media and each other informed of their division of responsibility and any changes to it.

According to the instructions, communications shall be handled efficiently and with versatility, using briefings, network communications, and phone service as the key media. In organisation of phone service, special attention shall be paid to the needs of those involved in the crisis and their families. The authorities are further instructed to interact with the media openly, actively, helpfully, and without favouring any of them over the others. To ensure that the media are informed adequately, briefings and press conferences are to be held regularly but with due consideration to the nature of the crisis.

According to the instructions, well-functioning internal communications forms the basis for successful media liaison work. Therefore, it is of primary importance to maintain secure internal communications in all situations.

2.5.8 Rules, regulations, and instructions concerning the media, the Internet, and computer games

Up-to-date legislation and self-regulation are the primary means employed in combating illegal and harmful Internet content. The Penal Code statutes on, for instance, child pornography, racism, fraud, and libel also apply to criminal acts online. However, it is substantially more difficult to perform supervision and surveillance on the Internet. Still, the authorities possess extensive rights to access information where electronic communications identification data are concerned. The Coercive Measures Act and the Police Act grant the authorities the necessary powers to apprehend the perpetrator of a

criminal act conducted on the Internet, when the conditions specified in the law have been met.

Legislation

As do all Western democracies, Finland subscribes to the principles of freedom of speech and of publication. Publication and programme activities are regulated by the Freedom of Speech Act as passed in 2004, which, among other provisions, repealed the Freedom of the Press Act and the Broadcasting Liability Act. The Freedom of Speech Act is based on the principle of media neutrality; i.e., the obligations and responsibilities are in principle the same regardless of the medium. As far as the Internet is concerned, the Freedom of Speech Act mainly applies to network publications, which refers to a set of network messages, arranged into a coherent whole comparable to a periodical from material produced or processed by the publisher, and intended to be issued regularly.

The use and operation of electronic communications networks is provided for in such laws as the Communications Market Act and the Act on the Protection of Privacy in Electronic Communications. The Communications Market Act addresses matters such as the liabilities and duties of telecommunications enterprises in offering electronic communications network services. The Act on the Protection of Privacy in Electronic Communications applies to the confidentiality of electronic communications, the handling of electronic communications identification data, and electronic communications information security.

The electronic communications operator's and administrator's responsibility for the information provided by their services is provided for in the Act on the Provision of Information Society Services. According to said act, the service provider is not liable for the content of the information transmitted if he or she does not initiate the information, does not select the receiver of the transmission, and does not select or modify the information contained in the transmission.

A court may order a service provider to disable access to information stored by him or her if the information is clearly such that its continued availability to the public or its transmission is prescribed as punishable or a basis for civil liability. If a court has ordered the service provider to disable access to the information stored by him or her or if the service provider is notified of a copyright or related right infringement, the service provider shall, to avoid liability for the content of the information provided by him or her, act immediately and without delay.

Thus, it is an established principle of the current legislation that the service provider or operator is not liable for the content of the information. Accordingly, the operator is not responsible for the content and need not supervise it. According to the 'notice and take down' principle, the operator is under obligation to remove content only if it is made known to him or her that the content is illegal. The potential illegitimacy of the content is always determined by a court of law at the request of the police. In a case like this, it is possible for the court to pass judgement in less than 24 hours. The police will inform the telecommunications enterprise of any material to be deleted.

Child pornography and racist content are an exception. If the content includes pornographic images depicting a child, violence, bestiality, or incitement to racial hatred, the service provider shall, by law, immediately disable access to any such information on his or her server.

Self-regulation

Commerce and industry engage in voluntary co-operation to prevent harmful and criminal activities and to reduce inappropriate content. This self-regulation in commerce and industry is based on mutual agreements by various operators as well as common practices jointly agreed upon. The organisations also monitor observance of these agreements and practices.

The self-regulatory body for mass media content is the Council for Mass Media in Finland, established by media, publishers, and journalists in 1968. Its task is to provide interpretation of good journalistic practice and to defend the freedom of speech and publication. The Council for Mass Media in Finland published 'Guidelines for Journalists', concerning good journalistic practice, drawn up by the Union of Journalists in Finland and ratified by its affiliates. The latest version entered effect in early 2005. The decisions of the Council for Mass Media in Finland are based on these guidelines, which cover all aspects of journalistic work in newspapers, on television, on the radio, and on the Internet.

In addition to the Council for Mass Media in Finland, Internet content that is deemed harmful is supervised also by the Ethical Committee for Premium Rate Services; the Finnish Information Processing Association Ethics Working Group, the Council of Ethics in Advertising, the Consumer Agency, and the Consumer Ombudsman. For their part, Finnish operators jointly released a so-called Netiquette document, which provides parents with tips on how to supervise their children's use of the Internet, warns children themselves of the dangers of the Internet, and guides them towards responsible use of the Internet.

Online discussion sites

There are numerous discussion boards available on the Internet, and this type of interaction has quickly become extremely popular. The publisher of a network publication may, in addition to the published material, operate discussion boards or host other material for which the publisher acts as a transmitter. The discussions on the discussion boards cover a wide spectrum of topics, ranging from social issues to personal matters.

There are a great many discussion boards, of various types, both in Finland and abroad, and the operators' rules governing the discussions and moderation vary greatly. On some sites, the participants use their real names, but usually people are not required to reveal their true identity. Some services require registration, but in practice it is impossible to control the authenticity of the registration data. Many discussion boards do, however, have their own set of rules concerning, for example, use of a false identity,

harassment, inappropriate language, and violent content. However, a participant can simply start using a discussion board that has fewer restrictions.

There are no general or universally applied principles for discussion board supervision or verification of identity. The staggering number of messages alone makes it extremely challenging in technical terms to supervise discussion boards or forums.

The Internet itself is in a constant state of development and change. In recent years, traditional discussion boards have been replaced by various virtual communities, whose popularity has increased dramatically. Among the most popular of these communities are IRC-Galleria, Habbo Hotel, Facebook, and MySpace. They are global and virtual meeting places where it is possible to engage in conversation, play games, or share images or any other content with a limited number of people or in public. The rules of these communities vary. For security reasons, people often do not reveal their real identity in the virtual world, although in smaller communities and more restricted discussion forums the real identity of participants may be generally known. Assuming virtual identities, the authorities, such as youth leaders, psychologists, and the police, have also gradually started to participate in virtual communities.

The right to express one's opinion anonymously is an essential part of the freedom of speech. For this reason, the means to supervise Internet discussions are limited, so on many sites discussion is completely free of supervision of any kind.

The Act on the Protection of Privacy in Electronic Communications provides for protection of some communication systems, such as telephone, e-mail, and voice mail communication, which makes them better protected than the messages on discussion forums. According to the Finnish Constitution, everyone's private life, personal honour, and the sanctity of the home are guaranteed. Furthermore, the secrecy of correspondence, telephony, and other confidential communications is inviolable. Therefore, it is inconceivable for the contents of such confidential communications to be supervised.

Computer game supervision

In Finnish legislation, computer, game console, and video games are defined as interactive audiovisual programmes and as such are exempt from mandatory inspection. However, all games distributed in digital format must be submitted to the Finnish Board of Film Classification to be classified in accordance with the scheme of recommended age limits of 3, 7, 12, or 16 years or the binding age limit of 18. Most games are classified according to the Pan-European Game Information age rating system. Such games are automatically approved and registered by the Finnish Board of Film Classification. If a game has not been classified according to said system, a Finnish age limit label is required. In other words, every game must be classified according to its harmful effects. The lower age limits are usually recommendations, but the age limit of 18 is always binding; i.e., it must be observed in all circumstances. In practice, it is the parents or guardians of a minor who decide what kinds of games he or she is allowed to play.

The Finnish Board of Film Classification has the right to demand the inspection of a game if it is likely to contain material harmful to a child's development. Should they deem it necessary, the importer or producer of a game may also have it inspected. If a game has been inspected by the Finnish Board of Film Classification, the lower age limits are not recommendations but binding, so distribution to a person who has not reached the required is age is illegal.

Only so-called utility programmes – such as educational programmes – and online and Internet-downloadable games are exempted from this requirement.

Computer games can be played on individual computers or game consoles, but nowadays more and more players engage in playing against each other and/or in teams with other players online. Some of the games are 'edutainment' games, offering an educational element, whereas others are purely for entertainment. The same rules that apply to all Internet content apply to these games.

There are also money games, where the player invests a sum of money and, according to an element of chance, may or may not win something. Operating, marketing, or otherwise promoting gaming activities in Finland without a licence is forbidden by the Lotteries Act. In practice, such games can be played via foreign Internet services.

2.5.9 After-care legislation

The psychosocial support provided for those who suffered in the incident is part of general health-care, which is provided for in the Primary Care Act, the Act on Specialised Medical Care, the Mental Health Act, the Sickness Insurance Act, the Occupational Health Care Act, and the Child Welfare Act.

These laws provide for social welfare and health-care and specify the obligation to provide such services. The Primary Care Act provides for maternity and child health clinic services, school and student health services, student welfare, and basic health-care doctor's appointments, as well as other basic health-care services. The Act on Specialised Medical Care provides for specialised medical care for students and mental health services for children and adolescents. The Mental Health Act provides for mental health services for all citizens, regardless of age. The Child Welfare Act guarantees children less than 18 years of age and adolescents aged between 18 and 20 the right to a safe growing environment, a harmonious and well-balanced development, and special protection.

2.5.10 The Penal Code

Serious offences punishable by law in Finland are defined in the Penal Code. Some less serious criminal acts are covered by other laws. The most common punishments meted out are fines and imprisonment. The most severe punishment under Finnish legislation is life imprisonment.

Chapter 21, Section 1 of the Penal Code addresses manslaughter. An act whereby someone is killed by another person constitutes manslaughter. Section 2 of this chapter

of the law defines murder. For an act to constitute murder, manslaughter has to be 1) premeditated; 2) committed in a particularly brutal or cruel manner; 3) committed by causing serious danger to the public; or 4) committed by killing a public official on duty upholding the peace or public security, or because of an official action. Furthermore, the offence shall be judged to be aggravated when assessed as a whole. The only punishment possible for murder is life imprisonment. Thus, in penal terms, the Jokela incident can be considered to involve murder.

Chapter 34, Section 1 of the Penal Code defines criminal mischief. For an act to constitute criminal mischief, a person has to start a fire, blow something up, or induce a flood or other natural disaster such that the act is conducive to causing general danger to life or health or a general danger of very serious economic loss. According to Section 3 of the same chapter of the law, if the criminal mischief is committed in such a way that serious danger is caused to the life or health of a great number of people or such that, on account of the duration or extent of the imminent danger or for another reason, very serious danger is caused to an important societal function, the act constitutes aggravated criminal mischief. Furthermore, the offence shall also be deemed aggravated when assessed as a whole. Both criminal mischief and attempted criminal mischief are punishable, and, on the basis of Section 9 of the same chapter, even preparation of endangerment is punishable. On the above grounds, the perpetrator's attempt to set fire to the school building in Jokela constitutes attempted aggravated criminal mischief.

The Penal Code aims at protecting the individual's and society's important interests and objects of legal protection from violation. Physical integrity is considered one of the most important objects of legal protection; accordingly, the most severe punishments under the law are reserved for offences against life. In current thinking, the main effect of punishment is 'general deterrence', the idea being that the threat of punishment and awareness of actual punishments meted out prevent people from committing criminal acts. Nowadays, alongside simple deterrence, punishments' effect in enhancing and maintaining morals is considered important.

2.5.11 The National Strategy for Combating Violence

In December 2006, the government issued the Decision in Principle on a National Strategy for Combating Violence, which aims at reducing the harmful effects of serious violence in Finland. This is the first extensive strategy of its kind, involving cooperation of several ministries and other authorities. The objective is to halve the number of violent deaths within the next few years.

In view of international figures, most crime-related problems in Finland are quite small and positive developments are taking place. Where offences against life are concerned, the situation is quite different: 2.5 times as many offences against life are committed in Finland than elsewhere in Western Europe. There are not many cases of less serious violence in Finland, so the problem seems to be the serious effects of violent acts. Neither has there been a corresponding reduction in violence rates to match the decline in many other types of crime in recent years.

The National Strategy for Combating Violence includes both general and specific measures to improve the situation. The general measures included are prevention of marginalisation, development of mental health services, bringing about a change in attitudes, and local safety planning. The first three measures are essentially aimed at young people. The more specific measures included in the strategy are the reduction of alcohol-related violence, the reduction of violence against and committed by children and adolescents, reduction in violence against women, the lessening of occupational violence, and certain other specific measures.

The role of schools in the prevention of violence against and committed by children and adolescents is also highlighted in the strategy. According to the strategy, a plan to prevent violence, bullying, and harassment in schools shall be drawn up and implemented in all schools. Furthermore, the strategy aims at supporting the psychoemotional development of children and adolescents and providing them with high-quality education in relevant, practical aspects of the legal system. To prevent school bullying and violence, the school authorities should improve the physical and psychological environment of schools and offer sufficient student welfare services.

2.5.12 The Internal Security Programme

In September 2004, the government launched its first Internal Security Programme, which was extensive and crossed administrative boundaries. Nine ministries and numerous experts co-operated in preparation of the programme. Its long-term objective was for Finland to be the safest country in Europe in 2015.

The programme forecast major future challenges, set objectives for 2007, and outlined the measures to be taken. The objectives were made more concrete through definition of key parameters and indicators to help authorities monitor the progress of the programme. A follow-up report was published in May 2007, and a decision to continue the programme was made around that time.

The first Internal Security Programme specified seven key challenges in the future. Among them were marginalisation, an increase in accidents, everyday safety, and terrorism. Of these, increasing marginalisation was considered the biggest threat, as a criminal lifestyle is often the result of marginalisation. Four of the six main objectives were concerned with crime prevention and the position of the victim.

The most important measure to be taken to prevent marginalisation was deemed to be supporting young people who are in danger of becoming marginalised, by organising new forms of youth and social work that will help them to become better integrated into society. As part of this strategy, a project to prevent the marginalisation of young men eligible for military service was launched in the Finnish Defence Forces.

One of the objectives was to develop the legislature related to student welfare and guidance counselling. This was implemented by requiring upper secondary schools to draw up a Student Welfare Plan document by 1 August 2005 and include its content in the curriculum. According to the follow-up report, pupil and student welfare teams play an important role in prevention of juvenile violence.

The Internal Security Ministerial Management Group made a decision concerning the reduction of violence, according to which the emphasis in 2007 was to be on lessening violence against children and adolescents.

The objectives set for reducing the number of accidents and offences against life were not reached, but progress was made in many areas nonetheless. One of the key objectives of the programme was to increase co-operation among authorities, which was clearly accomplished in all levels of administration.

2.6 School killings in other countries

Before the Jokela incident, there were no school shootings of this magnitude in Finland. A school killing did occur in an upper-level comprehensive school in Raumanmeri in 1989, when a 14-year-old schoolboy shot two pupils as the first lesson of the day was starting. The victims were 14 and 15 years of age. The perpetrator fled the scene, but the police caught up with him approximately 20 kilometres from the school. According to the perpetrator, his motive for the killings was school bullying. While the Jokela shooting was being investigated, a second school shooting took place, in Kauhajoki, where the number of victims was 11, the perpetrator included.

Shootings like these, in which a student kills several schoolmates or members of staff, are rare internationally. The exception to this rule is the United States, where the total number of fatal school shootings in the past few decades is close to 50. There have been a few cases elsewhere – in Germany, for example.

As far as the number of victims is concerned, the most serious incident took place in 2007 in the USA, on Virginia Tech's Blackburg campus. Other incidents with numerous fatalities occurred in the 1960s in Texas; in the 1980s in Canada; in the 1990s in Scotland and in the USA's Columbine, Colorado; and in the 2000s in Germany, in Red Lake in the US state of Minnesota, in Israel, and twice in Finland.

In a report published in 2002, the United States Secret Service analysed 37 attacks on schools. There are few similarities in these attacks, and it was not possible to compile a profile of a typical school killer. However, all were male and between 11 and 21 years of age, with 85 per cent between 13 and 18 years old. Their family circumstances were dissimilar. Two thirds were from two-parent families. In a third of these, one of the parents was not the child's biological mother or father. So, in two thirds of the two-parent families, both parents were the child's biological parents. Only a few of the children covered in the report lived with foster parents.

The level of the perpetrators' school achievement was variable. For approximately 40 per cent, the grade point average (GPA) equated to a mark of A or B. For a little under 50 per cent, the average mark was typically a B, C, or D, with only 5 per cent receiving Fs at least occasionally. Almost two thirds of the attackers had never or seldom been in trouble at school. A third had at some point been suspended, and 10 per cent had been expelled from school.

As to social relationships, 41 per cent of the killers had social connections with the student mainstream or were considered to belong to the mainstream. A third of them had social connections with students rejected by the mainstream. Only 12 per cent did not have any close friends. However, one third were estimated to have spent a lot of time on their own. Almost half of the attackers had participated in extracurricular activities, such as sports, clubs, or religious activities.

One third had had their psychological health evaluated at some point. Half of these, or one third of all attackers, had been diagnosed with an illness or disorder. Although only a few of them had received psychological treatment, 78 per cent had attempted suicide or had had suicidal thoughts. The records show that approximately 60 per cent of the attackers had been depressed or desperate. One fourth are known to have been involved in intoxicant abuse. The data on the use of psychotropic medication are incomplete, and all that is known is that four of the attackers, or 10 per cent, are known to have stopped taking their medication.

A quarter of them are known to have liked violent films, and likewise a quarter enjoyed violent books. One in 10 was interested in violent computer games. By contrast, 37 per cent expressed an interest in violence in their own writings. Under a third had behaved violently, and a quarter of the attackers had been arrested at some point.

Almost all had suffered a major loss before the violent act. Two thirds had experienced failure or loss of status. Half of them had experienced a terminated relationship with someone close. In approximately 15 per cent of the cases, attackers or their loved ones had suffered a serious illness. On the basis of their earlier behaviour, most (83 per cent) of the attackers were seen to have demonstrated problems in coping with loss.

Having presented data on the 37 school killings, the report concluded that it is possible that some school shootings may be preventable. School and law enforcement authorities should develop a method for identifying and analysing the threat of a school attack and for utilising these analyses to prevent school attacks. This proposal is justified by the 10 most important conclusions drawn from the school attacks that were studied:

- Incidents of targeted violence at school were rarely sudden, impulsive acts.
- Prior to most incidents, other people knew about the attacker's idea and/or plan.
- Most attackers did not threaten their targets directly before pursuing the attack.
- There is no useful profile of enduring personality traits that describes a school shooter.
- Most attackers engaged in some behaviour, prior to the incident, that caused concern to others or indicated a need for help.
- Most attackers had problems coping with loss or failure. Many of them had planned or attempted suicide.
- Many attackers felt they had been bullied, harassed, or hurt.
- Most attackers had had access to a weapon and had used it before.
- In several cases, other students had to some extent incited or encouraged the attacker; had helped the attacker, for example, to acquire a weapon; or had discussed with the attacker ways to commit the act.
- Despite quick action on the part of the authorities, most shootings ended for reasons other than intervention by authorities.

These conclusions apply to some extent to the Jokela incident. The act had been planned. Other students had some idea of the perpetrator's interest in school killings, but the connection to actual intentions of killing somebody was never made. The Jokela shooting resembled the Columbine incident, which the perpetrator copied in many respects.

There are also many similarities between the Jokela incident and other school shootings. For example, the shooting incident at Northern Illinois University in February 2008, which resulted in the death of six students, had some features in common with the Jokela incident. It is also comparable to shootings wherein members of a work community were targeted. In a work community, the perpetrator is older, but the incident still involves his or her most important sphere of daily life – here the work environment rather than school. Since 1986, more than 30 shooting incidents in work communities have been recorded, mainly in the USA. In one of these, in 1989, a shooting incident occurred at a printing company in Kentucky, where a worker shot eight co-workers and himself. This incident led to an investigation into the possible harmful side effects of SSRI medication.

What makes school shootings exceptional as offences against life is that they usually involve a large number of victims. The perpetrators often have no history of violent behaviour. The schools where the killings occurred were previously known as peaceful and safe and their surroundings relatively crime-free.

Measures taken in Germany after the Erfurt shooting incident

Using a pistol for which he had a legal permit, a 19-year-old student expelled from an upper secondary school killed 16 people and then himself in his former school in Erfurt, Germany, in April 2002. The incident triggered a series of legal and other reforms in Germany, all aimed at preventing similar incidents from occurring in the future. The legal measures taken were stricter legislation concerning the acquisition of handguns and supervision of the Internet, computer games, and the media as regards violent content.

The age limit for permits for firearms used in target shooting was raised from 18 to 21 years and for firearms used for hunting purposes from 16 to 18 years. A person under 25 years of age applying for the first time for a permit for a large-calibre firearm has to undergo a medico-psychological examination before being granted a permit. Pumpaction guns with a pistol grip were banned in target shooting.

Youth legislation was made stricter through application of the same laws to computer games as to video films. A list is maintained of computer games and films considered especially harmful to children and adolescents, and distribution of these is prohibited by law. Legislation criminalising the publication and distribution of written material expressing admiration of cruel or otherwise inhuman violence against humans or creatures resembling humans was extended to include radio broadcasting and other media and telecommunications services. The punishment for activity in breach of these laws is imprisonment or a fine.

Alongside legislative measures, the German authorities launched a campaign to activate parents to supervise their children's use of the Internet and other media. In addition, a prestigious working group appointed to investigate the incident published an extensive report containing around 160 individual recommendations for further measures to be taken.

Recommendations based on the Virginia Tech incident investigation

In the US, a 23-year-old student at Virginia Tech shot 32 people, then himself, in April 2007. An extensive report was drawn up on the incident, with 70 individual recommendations. The recommendations were aimed at educational institutions, universities, mental health services, law enforcement authorities, rescue services, legislators, and other authorities in the state of Virginia and elsewhere. The recommendations mainly concerned:

- the preparedness of universities for an emergency, such as a school shooting
- how to inform those on the campus of the danger
- the duties and training of the police
- mental health services
- privacy and data protection
- researching the background of a person applying for a firearm permit and possession of firearms on campus
- measures taken in the early stages of the incident
- training and activities of the campus police, the performance of emergency response centre operators, door solutions in educational institutions, and response to bomb threats
- the actions of the rescuers and emergency medical care personnel
- looking after the victims and their families
- after-care and preparedness for it

While the Virginia Tech investigation was still in progress, the President of the United States ordered a team of three experts to draw up a report on what the government could do to prevent similar tragedies from occurring in the future. The task force met with representatives of various organisations, in several states, and came to five major conclusions:

- Information on people who are in danger of harming themselves or others does not flow the way it should.
- Accurate information on those entitled to possess firearms does not flow upward to those who need this information.
- Parents, students, and teachers should be taught to recognise the warning signs and encourage such people to seek professional help.
- People should have access to such mental health services as they need.
- The existing plans and procedures should be further developed through practice and improved communication.

On the basis of these conclusions, the task force listed a total of 34 recommendations in its report to the President.

Recommendations based on the Columbine incident investigation

In the USA on 20 April 1999, two students at Colorado's Columbine High School killed 12 students and a teacher. On 28th January 2000, the governor of Colorado appointed a review commission to conduct an independent review of the tragedy and to issue recommendations to prevent similar incidents in the future. The recommendations mainly dealt with:

- the authorities' crisis response actions
- communications between authorities and the use of communications equipment
- systematic advance planning for critical emergencies
- interaction with media representatives
- the school police crisis response actions and training for emergencies
- the flow of information in situations involving direct or indirect threat of school-based violence
- school bullying
- systematic assessment of threats and dealing with them
- emergency medical care
- victim identification procedure and family access to bodies
- suicide prevention in the aftermath of school killings

The commission further stated that it did not recommend the introduction of metal detectors, surveillance cameras, or other security equipment into schools. These have been found to be effective in combating other types of crime but are not cost-effective in dealing with school-based violence, such as school shootings.

2.7 Protocol for threat assessment in schools

After the Jokela incident, the Finnish Psychological Association studied a protocol developed in Germany for systematic assessment of the threat of violence in schools. The protocol is based on the above-mentioned United States Secret Service investigation that covers 37 American school shootings.

Once a student has displayed behaviour that endangers his or her security, or that of somebody else, the head teacher calls a meeting chaired by an expert in this field. Others to be summoned are those who know the person who made the threat, those threatened, and those who are able to intervene. The main objectives of the meeting are to share all essential information, to assess the risk of violence, and to decide whether to call in the police or other authorities or whether any outside help is needed at all.

The threat is assessed in the meeting as the participants go through a series of preplanned questions and try to find answers to them. The analysis begins with questions about the student who made the threat, including said student's personality and background, and then proceeds to analysis of possible motives and people targeted. If the decision is made not to call the authorities to the scene, the responsibility lies with the school and a plan of action must be drawn up. It consists of measures whose purpose is to increase the sense of security at the school, support the desperate student, and eventually make the student stop his or her threatening behaviour. The key issue is that of deciding who does what and monitoring the effects of the measures taken.

3 GENERAL RESEARCH DATA CONCERNING THE JOKELA INCIDENT

3.1 Juvenile homicide in Finland

On 14th May 2007, the National Research Institute of Legal Policy published a report on juvenile homicide in Finland. The study focused on homicides committed by people under 21 years of age between 1980 and 2004. School-related homicides are rare in Finland, with the last one prior to the Jokela incident occurring in the late 1980s.

Each year, two to three 15-to-17-year-olds commit homicide, while the corresponding figure for 18-to-20-year-olds is between four and 10. During the period studied, the number of homicides was cyclic; i.e., the number increased in times of economic growth and decreased during economic recession. The number was at its highest in the late 1980s and between 1998 and 2002, after which the trend has been downward. Approximately 8 per cent of homicides were committed by juveniles (persons under 21 years of age). In Finland, the proportion of juvenile homicide and aggravated violence among the population is, by and large, the same as in other countries in Western Europe and internationally quite low. However, compared to the EU average, intentional homicide is committed in Finland roughly twice as often and the number is greater only in the Baltic countries, the Balkans, and Hungary.

In Finland, 90 per cent of juvenile homicide was committed by males. Approximately 25 per cent of juvenile homicides were connected with robberies or burglaries, and a firearm was used in 17 per cent of them. Of the victims, 53 per cent were known to the perpetrator, 27 per cent were strangers, and 20 per cent were members of the perpetrator's family.

Juvenile homicides are more brutal, better-planned, and more often connected with property crimes than homicides committed by non-juvenile perpetrators are. Homicides with multiple victims are, however, equally common in the two age groups. A large proportion of juvenile homicides are committed in concert with other juveniles. Before committing the crime, approximately half of the perpetrators had been in psychiatric institutional or non-institutional care. Of the juvenile perpetrators, two of every three males and one in three females had a history of previous violent crime. About 80 per cent of the perpetrators were drunk while committing the crime, and 67 per cent were drug abusers. There is a well-known correlation between increased alcohol consumption and violent crime.

Two out of three perpetrators came from a broken home. With most of them, at least one of the parents was a drug abuser and the childhood home had been broken during the perpetrator's early years, in most cases because of conflicts arising from the parents' substance abuse problems. The perpetrators' comprehensive-school years are usually characterised by learning and behavioural problems. Half of them received special-needs education and, because of their criminal behaviour or for reasons connected with child welfare, one third had been taken into care by their teenage years.

3.2 Crime in Tuusula and Jokela

According to police statistics, Tuusula is, generally speaking, a relatively low-crime area when compared to other municipalities, of roughly the same population, in the province of Southern Finland. The comparison, made with the municipalities of Järvenpää, Kerava, Kirkkonummi, Lohja, Nurmijärvi, and Hyvinkää, was based on data from 2000–2006.

The level of criminality in Tuusula was calculated as the number of violent offences, property offences, drug offences, police alerts, cases of domestic violence, and arrests due to intoxication, relative to the population. The number of homicides and attempted homicides was considered separately. According to all these indicators, there was less crime in Tuusula between 2000 and 2006 than in the control municipalities, on average.

As regards drug offences and the number of police alerts, Tuusula was the best of all municipalities studied. In comparison of the number of homicides and their attempts, Tuusula came third and was better than average here, too. The comparison of homicides and attempted homicides is influenced by the fact that the total numbers are so low in all of the municipalities that chance variation plays a significant role in the statistics.

The data presented above do not differentiate the three main population centres – Hyrylä, Kellokoski, and Jokela. Instead, the numbers refer to the whole municipality. Some information on the crime statistics for the three population centres is available in the national Security Surveys conducted by Provincial Police Command units in 2003 and 2006. The number of responses to these was, however, very small, especially in Jokela and Kellokoski.

According to the 2006 survey, the feeling of insecurity was more widespread in Jokela than in Hyrylä and Kellokoski. Of Jokela residents, 14 per cent felt their neighbourhood was not totally safe late on Friday and Saturday nights. The corresponding figure in Kellokoski was 6 per cent and in Hyrylä 10 per cent. 38 per cent of Jokela residents, 10 per cent of Kellokoski residents, and 32 per cent of Hyrylä residents felt the central area of the population centre was not totally safe on Friday and Saturday nights. From the level indicated in the previous survey, the feeling of insecurity in central Jokela had increased by 9 per cent. A third of Jokela residents considered crime in their neighbourhood a serious problem in 2006, whereas in 2003 the corresponding figure had been 22 per cent. About 14 per cent of Hyrylä residents and 9 per cent of Kellokoski residents saw crime as a serious or extremely serious problem in 2006. The number of Jokela residents worried about increased crime was higher than the average for the district of Central Uusimaa.

3.3 Violence against adolescents

Since 1995, Juvenile Delinquency Survey results have been utilised by the National Research Institute of Legal Policy in their research on violence against adolescents. The participants are asked about violence, but the survey is not location-specific. There are two other surveys that provide information for studies on violence – namely, school health-care surveys and the National Victim Survey, which so far has been conducted

five times. These surveys provide highly reliable information on violence experienced by 15-to-19-year-olds.

From the latest Juvenile Delinquency Survey, it seems that the number of violent acts committed by 15-to-16-year-olds is decreasing rather than increasing. The data are based on the criminal acts reported by the participants themselves. The situation was relatively stable between 1995 and 2004.

According to the National Victim Survey, in 2006 the risk of becoming a target of violent behaviour was greatest for 15-to-24-year-old males. The risk has clearly diminished, however, as in 1980 24 per cent of males in this age group had experienced physical violence whereas the 2006 figure was 11 per cent. On the other hand, threatening with violence was on the increase. Thus, it is evident that young males are a problematic group both as perpetrators and as victims of violent crime.

According to preliminary data from the Child Victim Survey conducted in 2008, 40 per cent of boys in the ninth year report having been a target of a violent act, or its attempt or threat. The corresponding figure for sixth-year students is 37 per cent. Around 30 per cent of girls in the ninth year and 23 per cent of sixth-year students reported having been the target of a violent act, its attempt, or a threat of one during the past year. According to several studies, most of the violent and aggressive behaviour experienced by schoolchildren is peer-based.

3.4 School bullying

How common is school bullying in Finnish schools?

The most extensive research into how common school bullying is and how it has changed in Finland is conducted by the National Research and Development Centre for Welfare and Health with its annual School Health Care Survey. The National Research and Development Centre for Welfare and Health School Health Care Survey material was utilised in a special report entitled 'Bullying in Upper-level Secondary School 2000–2007', commissioned by the Ministry of Education. According to the study, 10 per cent of the boys and 6 per cent of the girls were bullied at least once a week, which equates to an average of 8 per cent. On the basis of the School Health Care Survey, one can conclude that there is considerably less bullying in upper secondary school, as only 2 per cent of the boys were bullied at least once a week. With girls, the percentage was even lower

School bullying was also studied in a survey entitled 'Promoting Welfare and Health in Comprehensive School', commissioned jointly by the National Board of Education and the National Research and Development Centre for Welfare and Health. According to the results published in May 2008, 42 per cent of the schools providing basic education for years 1–6 felt there was no repeated bullying at all. One third estimated that 1 to 2 per cent of pupils became a target for repeated bullying. The questionnaire was filled in by the head teacher, the Pupil Welfare Team, or the Management Team.

School bullying was studied also in a research and development project (entitled 'KiVa Koulu' in Finnish) funded by the Ministry of Education. According to this project, approximately 10 per cent of lower-level comprehensive-school pupils are bullied weekly. The target group in a study called 'From a Boy to a Man', which also sheds some light on school bullying, consisted of 2,551 Finnish boys born in 1981. In the study, they were monitored from the age of eight until they were between 16 and 20 years of age. By the age of eight, 6.4 per cent of them had been bullied often.

According to the WHO (World Health Organization) Global School-Based Student Health Survey, school bullying in Finland is at an average level by international standards. In comparison to other Nordic countries, Finland and Denmark see significantly more school bullying than do Sweden and Norway.

There is a clear difference between the sexes in school bullying, with boys more likely to become school bullies than girls. Their roles in a bullying situation are also quite different, as boys tend to support the bully whereas girls remain on the sidelines. Furthermore, bullying takes different forms, depending on the sex. Boys often resort to direct aggression, such as jostling the victim or beating him or her up, whereas gossiping and manipulation are the usual methods employed by girls.

Contrary to popular belief, school bullying is just as common in small schools as in bigger ones. The size of the school or whether the school is in a city or in the countryside has not been found to have any connection to how common bullying is, not even in any previous studies.

Factors involved in school bullying were also studied in the above-mentioned special report entitled 'Bullying in Upper-level Secondary School 2000–2007', commissioned by the Ministry of Education. In this study, school bullying was found to have a correlation with several factors, including home, friends, school, and the student's state of health. Specific factors were a poor work atmosphere at school; corporal punishment; lack of close friends; daily suffering of several psychosomatic symptoms; depression; and, for girls, being overweight.

Effects of bullying

Bullying is defined as the systematic misuse of power or force. It is intentional and repeated. It may be psychological in nature, including, for example, slander, disparaging remarks, or ostracism. It may also take the form of physical violence, such as beating or shoving of the victim.

According to most studies, physically weak and unpopular students with a tendency to isolate themselves socially are the most likely to become targets for bullying. The typical victim is passive, relatively non-aggressive, and characterised by submissive behaviour. The victim seldom provokes an attack or takes revenge on the attacker. Children who are bullied are often timid and react to bullying by becoming depressed, anxious, and withdrawn.

There are two possible approaches to bullying, of which one focuses on the bully and the other on the victim. A group that is small but extremely prone to violent behaviour

consists of those children who both bully others and are systematically bullied themselves. The children in this group often come from abusive homes, and more often than not they have been targets of domestic violence.

In Finland, two studies have been conducted on the long-term and short-term effects of being bullied at school. According to the results, being victimised at school is, in the short term, likely to result in the student having an increasingly negative view of his or her peers and schoolmates. In the long run, the effects include an increased risk of succumbing to depression and a negative attitude toward other young adults. In extreme situations, depression can also manifest itself as self-destructive behaviour. Low self-esteem, on the other hand, is not a consequence of victimisation but, rather, a predictor for it. It has to be remembered, however, that the effects may vary with the victim.

Bullies are very likely to commit criminal acts and engage in anti-social behaviour later in life. Some of the factors predicting criminal behaviour include aggressiveness and behavioural problems, hyperactivity, and symptoms of depression reported by the child. On the basis of studies on the background of juvenile violence, it is also known that a child's development is influenced by both hereditary factors and the environment. Approximately half of the variation in personality traits is due to hereditary factors, which affect a person's intelligence, psychological characteristics, attitudes, and hobbies. Naturally, the genes' expression interacts with environmental factors. The child's environment has a significant correlation with potential anti-social behaviour later in life. In addition to the atmosphere at home and interaction between family members, the developmental environment of the child also is a filter for the effects of the living environment. The indirect social control provided by the neighbourhood is another factor affecting a child's development.

In work to determine the background factors of criminal behaviour in Finland, it was found that not only bullying others but also becoming a target for bullying may indicate future crime in some cases. The study of 37 school killings in the United States revealed that 71 per cent of the perpetrators had been bullied at school. In many cases, the bullying had been going on for a long time and was very stressful for the victim. Another study focused on the background of 102 school shooters. Of these, 20 per cent had been bullied, whereas the corresponding figure for the victims was 8.8 per cent. It was also stated that, as a result of bullying, the victim's self-esteem may plummet; the victim may become withdrawn, depressed, bitter, or angry; and he or she may even suffer from panic disorder.

Prevention of bullying in schools

School is an obvious place for bullying because it is difficult to avoid bullies there and, despite possible problems, a student still has to go to school. School also provides a crucial opportunity to reduce and prevent bullying. This is because, regardless of background, all children go to school. On the other hand, the social environment of the school makes it possible for them to learn important interaction skills. All too often, school bullying goes unnoticed. It is well known that only half of the children who are bullied come to the attention of the teachers for this. Schoolmates, on the other hand,

are only too aware of who is a target for bullying. If bullying goes undetected, there are no effective tools to combat it.

Intervention is one of the key measures in preventing school bullying and, in more general terms, juvenile violence. It has been shown that it is possible to reduce school bullying, which, in turn, will have a beneficial impact in reducing violence outside school, including adult violence and crime.

A few projects and programmes to combat school bullying systematically have been carried out in Finland.

The KiVa School Project [Translator's note: 'KiVa' stands for the Finnish 'Kiusaamisen Vastustaminen', meaning 'preventing bullying', and 'kiva' also means 'nice' in Finnish], initiated in September 2006 and financed by the Ministry of Education, aims at reducing and preventing school bullying. The objectives of the project are to create a programme of anti-bullying measures, to provide teachers with the necessary skills to combat bullying effectively, and to carry out an effectiveness assessment.

In the programme, children, teachers, and parents are provided with tools to prevent bullying by focusing, for example, on teamwork and class spirit. The school lessons included in the programme are not about bullying as such; instead, they deal with respect for other people on a more general level. This serves as background for starting to focus on the bully's problems and a discussion of what it feels like to be bullied and how a victim could be defended. The difference between good-natured bickering and bullying and the issue of how to support students in danger of being marginalised are other topics covered in the lessons. The authorities have created Internet games on the general subject to help children deal with its issues. The programme also provides an outline of intervention measures, as well as guides for teachers and parents. The central message of the programme is that bullying will not be tolerated and that it is possible to intervene. However, early intervention is necessary to ensure effectiveness.

More than 4,000 fourth-, fifth-, and sixth-year students have participated in the programme's first stage. Positive results can be seen in all age groups, in the assessments they gave of both themselves and their schoolmates. The programme also clearly improved teachers' skills.

The first results clearly show that both bullying and being bullied were reduced considerably in the schools that participated in the programme during the 2007–2008 school year. The number of children who bullied others and those who repeatedly became targets for bullying were both reduced by 40 per cent in the pilot schools. The programme also had a positive effect on the students' perception of the school atmosphere and motivation to learn.

The results of the programme are also significant on an international scale, as no corresponding programme utilising a system of test and control schools has managed to produce such good results, anywhere in the world.

Years 1 to 3 and 7 to 9 will participate in the programme during the 2008–2009 school year, after which it will gradually be implemented in all Finnish schools. The authorities aim to have the KiVa School Project available for all schools on a national level by the end of 2009.

3.5 Psychotropic medication

Diagnosing psychological problems in adolescents is especially demanding, as mood swings, for example, are part of a normal teenager's behaviour. To complicate matters further, there is considerable variation between age ranges in adolescent brain development. The difference in diagnosis and treatment between adults and adolescents is that the need for multi-professionalism and psychosocial care is far greater with the latter and the medication plays a less significant part. Behavioural disorders may be symptoms of depression, but, on the other hand, they also appear as independent symptoms.

It seems apparent that SSRI medication can be used effectively in the treatment of anxiety. For example, many attribute the significant downward trend in suicide mortality in Finland largely to improved medication. These medicines often inhibit aggressiveness and may also have reduced the number of homicides committed.

Research shows that old-style, tricyclic antidepressants are not suitable in treatment of adolescents; therefore, prescribing them for young people is not recommended. The new generation of antidepressants is the SSRI medications, whose mechanism of action is to increase the amount of a neurotransmitter called serotonin in the brain. These medicines are safer than tricyclic antidepressants and have been shown to be beneficial, at least for some patients, in treatment of severe depression in adolescents. This medication is used to treat depression (major depression) and anxiety disorders, such as panic disorder and the fear of public places that may be associated with it, fear of social situations, generalised anxiety disorder, and obsessive-compulsive disorder. According to some studies, these medications have not been effective in treating young patients. There are also reports of initial suicidal behaviour and increased aggressiveness in patients.

The European Medicines Agency (EMEA) and the Committee for Medicinal Products for Human Use (CHMP) issued a recommendation in 2004 stating that there was an increased risk of self-destructive behaviour and thoughts with all SSRIs and that their use is not recommended for treatment of adolescents. According to the recommendation, sometimes it may be unavoidable to treat a young person with SSRI medication and in such cases it is paramount, especially in the initial stages, that the patient be constantly monitored for any signs of self-destructive or aggressive behaviour. The authorities' reservations about SSRIs have reduced their use in treating young people worldwide, which, according to the latest studies, has brought about an increase in the number of juvenile suicides in the United States and the Netherlands, for instance.

The purpose and harmful effects of SSRI medication are displayed on the product labels. According to the labels, the medicines should not be prescribed to children or others under 18 years of age, as there is no proof of their effectiveness or safety for

minors. The labels also state that minors' use of the medication may result in increased risk of suicide attempts, suicidal thoughts, and hostility. On the other hand, terminating the medication suddenly may cause restlessness, irritability, and sleep disorders. The recommendation not to prescribe SSRIs to adolescents is not absolute. In 2004, the Finnish National Agency for Medicines stated in a bulletin that a doctor may apply discretion in prescribing these medications if the patient's condition so requires. If the doctor decides to prescribe the medicine, the patient must use it under supervision. Usually the dosage is low to begin with; then, if the effects are favourable, it is gradually increased if necessary. Several weeks or months should be reserved for terminating the course of medication, as this ought to be done gradually.

3.6 Effects of playing computer and Internet games

Media content, the Internet, and computer games are an essential part of life for children and adolescents today. Enriching the lives of the users, they in many ways have a positive effect on young people. They may have a bonding effect in relationships with friends and generally increase social capital. The benefits of educational games have been the subject of many studies, and lately attention has also been drawn to the potential benefits of entertainment games containing violence. According to some studies, 16-year-olds who do not play computer games at all have an increased risk of developing social problems as compared to those adolescents who play in moderation or even frequently. The youngsters who played regularly were found to have higher self-esteem and a closer relationship with their parents than those who did not play such games at all.

Children and adolescents are especially prone to the negative effects of violent entertainment. The effects are particularly harmful for children and adolescents who are psychologically fragile, are socially isolated, and have displayed signs of violent behaviour. The main problems are the numbing effects of violence on the viewer's mind, identification with the perpetrator instead of the victim, and the narrowing of the social spectrum as the child or young person spends more and more time playing computer games.

In the study of games, the emphasis has moved from traditional games to digital games, which have recently become extremely popular. There is an abundance of research data available, with partially conflicting results. According to some summaries, the research seems to indicate that the potentially harmful effects of violent computer games are real, but others consider the data insufficient for any far-reaching conclusions to be drawn. There are even opinions condemning all computer game violence studies, claiming that the methodology applied in them is not sound and that the results are artificial.

Some researchers have developed a theory according to which it is the violent media that increase the tendency toward aggressive behaviour by teaching children and adolescents violent behavioural patterns, creating restlessness and aggressiveness, and initiating violent thought processes. In addition, it has been found that playing violent computer games for an extended time has an impact on the person's personality, which is bound to be reflected in his or her immediate environment. The person may start to

make contact with peer groups that are prone to using violence. The person's increasingly aggressive personality and environment lead to increasing consumption of violent media, which, in turn, will lead to a vicious circle. In a study where children were monitored for two to six months, it was found that the children who played violent games developed a tendency to see the world in a more aggressive light. Not only that; they also talked and behaved in a more aggressive manner. In turn, the more aggressive and less pro-social behaviour of these children resulted in their being increasingly rejected by their peers.

In evaluation of the role of violent games in one's psychological development, it should be borne in mind also that the player has an active role in the construction of meanings. It is up to the player to seek a medium serving his or her needs. Furthermore, a negotiating and resisting mode of reception is always available for the player. It is therefore possible for visible violence to assume a different role in the experience of the player. The graphics of the game may lose meaning altogether, and, focusing on the strategic dimension created by the rules of the game and its interactive nature, the player may be able to see beyond the surface structure of the game, to a deeper level. This does not, however, mean that violence or sexual stereotypes are totally without significance.

The controversy in research into game violence may, to some extent, arise from the fact that in the United States the research data from studies on school killings have been used in politics and trials, which may have favoured a black-and-white, extremist approach in the discussion on game violence. In Finland, however, even researchers representing different fields are largely in agreement that it is necessary to protect children from violent games. Certain areas are clearly in need of further study, such as the effectiveness of age limits and the susceptibility of children and adolescents in various age groups to the harmful effects of violent games.

In conclusion, it may be stated tentatively that some studies indicate that the extensive playing of games focusing exclusively on violence may play a part in increasing the occurrence of violent behaviour patterns and thought processes. Still, there is much individual variation in the way a player construes the nature and meanings of a game. Cultural studies show that, just like popular culture in general, violent games can play an important role in enhancing an individual's social identity and functionality.

4 CONDUCT OF THE MEDIA

4.1 Petition on the conduct of the media

After the incident at the Jokela School Centre, thousands of people signed a petition organised by Jokela youngsters to question whether media representatives conducted themselves correctly in connection with the tragedy. The Prime Minister and four other ministers received the petition on 21 November 2007. The Prime Minister submitted the petition and a summary of the activities of the media, compiled by young people in Jokela, to the Investigation Commission for use in the investigation.

The petition took a critical view of the conduct of the media. The youngsters wanted to know whether it could be considered appropriate behaviour to stalk people with cameras at the entrance to the Crisis Centre; to pounce on hysterical people leaving the centre, demanding a statement; to dig into the lives of the perpetrator and the victims to build a picture of a tragic life; or to secretly photograph people in their grief and publish the pictures without permission. The youngsters also wanted to know whether the media considered themselves to have behaved correctly in trying forcibly to enter people's homes in the hope of getting a juicy story, or in eavesdropping on a discussion between a youth leader and a few of the youngsters or gate-crashing a memorial service while armed with a camera. The youngsters saw all this as evidence of the media representatives' total lack of respect for their grief. The summary, complete with copious examples, of the activities of the media during and after the incident was included with the petition.

In late autumn of 2008, the National Public Health Institute (now the National Institute for Health and Welfare) published preliminary results from a study concerning how the students involved in the shooting incident were coping with the effects. According to the preliminary data, it seems that the activities of the media placed an additional burden on the shoulders of the students who suffered from the most severe trauma.

Some of the students interviewed by reporters were found to have an increased risk of succumbing to post-traumatic stress disorder. One tenth of the students reported that answering the media representatives' questions had made them feel better, but a third of them felt that the effect had been the opposite. Some youngsters also felt that media coverage after the incident had had a negative effect on them. According to the study, it seems that being subjected to media interviews and following media coverage has deleterious effects, especially on those youngsters who have been severely traumatised and display psychological symptoms.

4.2 Conduct of the media

On the basis of the summary included with the Jokela youngsters' petition, studies conducted by the universities of Tampere and Helsinki as well by the National Public Health Institute, and the interviews conducted by the Investigation Committee, it seems evident that within 30 minutes of the incident there were dozens of reporters in Jokela. They photographed and filmed hundreds of youngsters running from the school into the

Crisis Centre, the ambulances, and the Finnish Red Cross buses. There was even close-up footage of the Crisis Centre and the buses, shot through the windows with telephoto lenses. The reporters harassed the evacuees and tried to interview people who were in a state of shock. In some cases, youngsters did not know they were talking to a reporter, as the media had infiltrated the groups of youngsters near the Crisis Centre. Some reporters went to the victims' homes, ringing doorbells with flowers in one hand and a microphone in the other. Others sent text messages to those who were still inside the school building or even called students who had just been evacuated, with total disregard for the danger a ringing phone could have caused if the students had still been inside. Even minors, including the children of one of the adult victims, were subjected to dozens of text messages and calls from reporters.

As there was little official information available, reporters went to great lengths in trying to wrest some information from those involved in the incident. The youngsters were left on their own, more or less at the mercy of the media. The authorities and crisis workers did not provide enough cover for them against the pressure from the media.

Research indicates that it was the conduct of the reporters and cameramen at the site that incited the Jokela youngsters to organise the petition. Their anger was aroused by the way the media, despite being asked not to do so, photographed people in their private grief in a manner that could no longer be called simply gathering information.

The Jokela school shooting was the first major media event in Finland for which the Internet became a major source of information. People learned of the incident via the Internet or heard about it from their friends and acquaintances who had seen the news on the Web. Reporters and cameramen also utilised the information available on the Internet in their work. Prior to this, the number-one media for up-to-date information had been radio and the telephone.

In Web journalism, the rules are not as clear-cut as in traditional journalism. It is deemed necessary to have as much information as possible on the Web as soon as possible. Furthermore, it has to be updated every 15 minutes or so. Many magazines and newspapers published flashy headlines, highlighting private and personal details. In the days following the incident, the media focused on smaller and smaller details and tried to stir up strong emotions. Many magazines' and newspapers' Web sites seemed to function as a sort of rubbish tip where all kinds of material was indiscriminately dumped. It seems that more consideration was given to the printed edition.

That the media sometimes went too far was probably because the situation was so unexpected for everybody, including the media, that no-one knew how to react. Instead of the most experienced and well-trained reporter, many media companies were forced to send to Jokela the one who happened to be on duty at the time. The managing editors steered the reporters at the site by giving them instructions to take pictures, to go nearer the victims, and to pester school authorities for student data. As communications between reporters and their editors were defective at times, rumours also started to circulate among the reporters. Furthermore, the gathering of information was not left entirely to professionals – several papers and magazines asked the public to submit

pictures and video clips to be published on the Internet. This material was not up to normal standards but was published anyway.

4.3 Journalistic codes of ethics

As journalism becomes increasingly competitive and tabloidised, the importance of ethics in journalism cannot be underestimated. Journalists all agree that ethical principles are extremely important but in real life do not necessarily adhere to them. There are no clear-cut ethical principles in Web journalism.

One of the cornerstones of journalism is that to interview a minor, a reporter needs to get permission from the parents. The youngster must also be aware that he or she is being interviewed and that the interview will be published via one medium or another. These principles were not adhered to in Jokela.

Another ethical rule is never to interview a person who is in a state of shock. It is, however, difficult to identify the symptoms of shock; therefore, a journalist should exercise his or her professional discretion and understand that people who have undergone a shocking event are very likely to be in a state of shock.

Impersonating a pastor or approaching a victim's family with the excuse of bearing condolences is simply reprehensible. Some of the reporters got so carried away by the events that, as they photographed people up close, they would even ask them to hug each other again if the moment of shared grief was not caught on film. The photographers' position was especially sensitive, as their targets were young people who were not accustomed to being approached so aggressively. The pictures that were published in magazines after the event were often very emotional.

4.4 Guidelines for journalists, published by the Council for Mass Media in Finland

Self-regulation in the media is practised by the Council for Mass Media in Finland (CMM), which deals with issues concerning good journalistic practice and the freedom of speech or publication. An investigation is usually initiated on the basis of a complaint, but sometimes the CMM also do so on their own initiative. If the complaint concerns, for example, an individual's right to privacy, the CMM requires the consent of the person filing the complaint. The decision of the CMM is either an acquittal or a condemnation. A mass media or news agency considered to have breached good journalistic practice is required to publish the CMM's condemnation without delay and any immediate comment.

The CMM comprises a chairman and 10 members. Seven of the members are elected by its affiliates, including the Finnish Periodical Publishers' Union, the Finnish Urban Press Association, the Finnish Newspapers Association, the Union of Journalists in Finland, the Association of Finnish Broadcasters, the Finnish Broadcasting Union, and the Finnish Broadcasting Company. Representatives of the public are elected by the CMM itself

The aim of the 'Guidelines for Journalists' material published by the CMM is to support responsible exercise of the freedom of speech in mass communication and to encourage discourse on professional ethics. The guidelines also provide instructions on obtaining information and on the rights of the interviewee.

It is recommended in the guidelines that a journalist inform the interviewee of his or her profession. It is important to observe the principle of openness in obtaining information. The interviewee has the right to know, in advance, in which context his or her statements will be used. He or she must also be told if the interview will be used in multiple media. The interviewee must always be told whether the conversation is intended for publication or will be used exclusively as background material.

In the section 'Private and public', it is emphasised that the human dignity of every individual must be respected and that the protection of privacy must also be considered when one uses photographic materials. Discretion must always be exercised in reporting on occurrences of illness or death or on victims of accidents or crimes. It is generally acceptable to cover and photograph any event that transpires in a public place without having to acquire the permission of the subject(s) in question. The right to privacy also applies in publishing of public documents or information from other public sources. The public availability of information does not necessarily imply that it may be published freely. Particular discretion should be used in dealing with minors.

4.5 Articles 8 and 10 of the European Convention on Human Rights

The European Court of Human Rights made a decision concerning articles 8 and 10 of the European Convention on Human Rights as well as the relationship between them. Article 8 concerns the individual's right to privacy and Article 10 the freedom of speech. According to some Finnish media representatives, the freedom of speech is unrestricted and absolute. This is clearly not the case, as it is restricted by the individual's right to privacy. The principles concerning these basic rights are clearly manifest in the decision made by the European Court of Human Rights.

In its decision on Article 10 of the European Convention on Human Rights, the European Court of Human Rights states that the freedom of speech is restricted by duties and liabilities and that a journalist is under obligation to observe the international code of ethics in his or her work. In other words, the European Court of Human Rights interprets Article 10 to be restricted by ethical issues. According to the article, the freedom of speech is restricted by the individual's right to privacy. The issue here is that of striking a balance between these two rights. The European Convention on Human Rights and the decisions of the European Court of Human Rights apply to Finland.

The European Court of Human Rights stated that the state is responsible for an individual's right to privacy and that the state has the duty to protect the individual when it comes to, for example, the relationship between the individual and the media. The basic assumption of the European Court of Human Rights is that the media observe the restrictions. If this does not work, the state is obliged to protect the individual, even in an individual case if need be

As to the scope of application of Article 8 of the European Convention on Human Rights – i.e., the scope of application of the individual's right to privacy – the European Court of Human Rights stated that the scope of protection cannot be defined accurately. However, instead of being narrow, the scope of protection is definitely expansive and multifaceted. It is not limited to the home, for instance. Instead, the issue is the protection of the individual's personality and right of self-determination.

In accordance with Article 8 of the European Convention on Human Rights, the pan-European view is that it is not acceptable to put an individual's private suffering on display without his or her consent. This principle applies to everybody, not just minors. A journalist must understand that it is inappropriate to interview or photograph a person in a state of shock. Moreover, a minor may be interviewed or photographed only with the consent of his or her parents. An individual's right of self-determination in terms of his or her visual identity and being photographed is part of the right to privacy. There are several decisions by the European Court of Human Rights on the restrictions related to publication of photographs, and also on situations in public places.

That the event itself is the object of public interest does not entitle journalists to photograph the witnesses or victims. Misconceptions about photography in public places are also corrected in the book *Journalismi ja sanavapaus* (in English, 'Journalism and the Freedom of Speech'), published in Finland in 2008. According to the book, photographs may be taken but not necessarily published.

4.6 The Council for Mass Media decisions on media coverage of the Jokela incident

Four complaints concerning the Jokela incident were lodged with the Council for Mass Media in Finland, all of them concerning the right of the perpetrator's family to privacy and the ethicality of the activities of the media.

Two of the complaints concerned photographs and video footage showing people around the perpetrator's home. The CMM considered this to be a breach of good journalistic practice and issued a notice to the papers that published these. The CMM justified this decision by stating that photographing people in a private yard constitutes a breach of the right to privacy. According to the CMM, the perpetrator's family can be likened to the other victims of the tragedy and therefore it would have been necessary to exercise extreme discretion in approaching them. The decisions refer to sections 27, 28, and 29 of the organisation's 'Guidelines for Journalists', which deal with publishing highly delicate matters of an individual's personal life; exercising discretion when reporting on victims of accidents or crimes; and photographing events in public places.

The third complaint concerned a news item on the perpetrator's parents. The news item mentioned that the mother had been born in Oulu and been involved in the music business and politics and that the father was a blues guitarist. Their names were not mentioned. The CMM did not consider this to be a breach of good journalistic practice. According to the CMM, a shooting incident involving nine victims was unique in the history of crime in Finland and therefore it was understandable that a newspaper wanted to provide its readers with information on the perpetrator's family.

The fourth complaint was about a magazine article that was based on a work published under a pseudonym and some pictures on an Internet forum used by some 40,000 people. In addition to the pseudonym, the text, pictures, and context of the message revealed the writer to be the perpetrator's father, whose identity had been confirmed also by the person filing the complaint. Considering the fact that the writer himself had decided to publish the text on the Internet, the CMM considered there to be no delicate or personal matters in the text. According to the CMM, the magazine had revealed the source of the story they published and this was not considered to be a breach of good journalistic practice.

No Jokela-related issues were dealt with by the CMM on their own initiative. After numerous requests for a statement, the CMM instead told the Jokela youngsters who had organised the petition that they could file a complaint. By this stage, however, they were so fed up with all the publicity that they did not lodge one. The CMM did prepare a statement but in the end decided to issue a press release only. The press release stated, among other things, the following: That many of the victims and eyewitnesses in Jokela were minors presupposes extreme discretion on the part of the media. Coming face to face with grieving and shocked people is always a challenge for a reporter or cameraman. Such persons should not be coaxed into giving an interview, nor should dishonest means be employed to get a statement from them. If people agree to an interview, it must be made exceptionally clear to them that this may result in wide publicity that will be totally out of the interviewee's hands later on.

4.7 Journalistic training

The Jokela incident made the media realise that there is a need to provide journalists with the kind of training that would prepare them to face situations that are shocking both to those directly involved and to the media representatives themselves. Almost every media company has analysed the Jokela incident. As a result, they have published new instructions for crisis situations and also organised debriefing sessions and training in identifying the symptoms of shock. The media have also organised numerous regional panel discussions on the relationship between the Internet and conventional media. Key topics have also included the roles of editors and reporters who are on the scene as well as who decides on what.

The Dart Center for Journalism & Trauma is a University-of-Washington-based expert body that is dedicated to promoting ethical, responsible, and accurate media coverage in crisis situations. It publishes a Web guide entitled 'Trauma and Journalism', aimed at journalists, editors, and managers, which was translated into Finnish after the Jokela incident. It provides useful background material for media companies for use in their own guidelines for handling similar events in the future. According to the guide, it is essential that all employees be familiar with the instructions.

Along with the police, fire brigade, and rescue personnel, media representatives are among the first professionals to arrive at the site of an accident or disaster. Like all guides published via international crisis journalism portals, the guide describes the experiences of professional journalists and gives detailed instructions on how to

approach victims in different crisis situations and how to report and photograph shocking events with discretion. Also included in the guide are journalists' stories of how they managed to cope with traumatic events and their aftermath.

According to 'Trauma and Journalism', good journalistic practice must always be observed, no matter what the assignment. The events should be described accurately and objectively. It is especially important to bear these principles in mind when dealing with catastrophes and extreme human suffering.

5 ANALYSIS AND CONCLUSIONS

Planning and implementation of the school killings

According to the perpetrator's diary entries, he had been planning the school killings since March 2007 – i.e., for more than seven months. He pursued his plan with determination, and as early as in the initial stages of the plan he was already mentioning in his writings that he intended to be armed by autumn. Prior to the incident, the perpetrator spent more time at home than earlier, keeping to himself and spending a lot of time at his computer. He also spoke threateningly to some other youngsters.

The perpetrator entered the school centre at 11:37am on 7th November 2007 and, moving around both inside and outside the building, shot the head teacher, the school nurse, six upper secondary school students, and finally himself. He also tried to set fire to the building but failed to do so.

The criminal investigation leaves no doubt as to the perpetrator. No evidence came to light in the investigation to indicate that any others were involved in the act. Naturally, there was no trial, as the perpetrator was dead.

The perpetrator admired the USA's Columbine school killings of 1999 and tried to copy several of the details. He was interested in social sciences and drawn to extremist movements, terrorist acts, and misanthropy, for example. Many of the events that interested him were violent in nature, but the perpetrator himself had no history of violence. Nor can his personality be considered violent.

According to his writings, many things in society were not right and because of that he could not live happily. He was willing to commit an act that, according to him, would improve society and inspire others to start a revolution and global war. The material he wrote in his manifesto and diary was largely copied from the writings of previous school killers.

He was well informed on school killings. At the time of the Columbine shooting, he was only nine years old, which suggests that his interest and expertise in the subject clearly originated from a later period. Another school killing that interested the perpetrator occurred at Virginia Tech, again in the USA, in April 2007. By this time, he had already written his first diary entries concerning his plan. The perpetrator familiarised himself with school killings mainly via the Internet, where it was easy for him to see that they had attracted a lot of publicity in traditional media as well.

Conclusion 1

On the basis of his writings and the way he carried out the act, it is clear that the perpetrator aimed to kill a great number of people and cause maximal destruction. He also wanted his act to receive a lot of publicity and coverage. He copied the execution of his plan from the school killings abroad that he so admired. The school killings constitute deliberate murder.

Self-rescue

The number of victims was probably reduced by the head teacher's announcement telling the students to stay in their classrooms. Apart from the victims, all students and staff managed to escape the school building, even though it was a long time before some of them were able to do so, even with the help of the police. The perpetrator's movements were restricted by internal doors, as the students and staff managed to lock some of these. On the other hand, evacuation was slowed down by the windows, which could not be opened from the inside.

The requisite rescue drills had been performed under the supervision of rescue authorities, and the school had a rescue plan and a crisis plan. Even though some improvisation was applied to the plans, not all of them worked, since the situation was so unexpected. The measures taken in the school building during the incident were largely improvised and uncertain.

From the school authorities' point of view, the safety-related network of plans and requirements is quite complicated. What is clearly needed is a municipal emergency plan. Pursuant to the Rescue Act, every municipality is under an obligation to draw up a rescue plan, earlier referred to as the Safety Plan. Since 2002, municipalities have cooperated with other authorities to draw up a so-called safety plan to promote everyday safety. Furthermore, a crisis plan and a plan to protect pupils from violence are provided for in the National Core Curriculum. The Occupational Safety and Health Act also includes requirements related to risk assessment and work safety planning.

Conclusion 2

The various plans concerning school safety and security should be clarified, coordinated, and adapted to better meet the requirements of various hazards and risk factors. This would make them easier to maintain, drill in, and implement if necessary.

Conclusion 3

A functioning PA system and the head teacher's announcement were important in providing the students and staff with crucial instructions in the initial stages of the incident. Preparing systematically for various hazards and utilising diverse technological solutions would improve security in both risk prevention and evacuation.

Immediate measures taken by the authorities

Within minutes of the first shots, the Emergency Response Centre received several emergency calls. The ERC alerted ambulance units, police patrols, and rescue units.

The first ambulance units and police patrols arrived at the school centre at 11:55am, by which time at least six victims had already been shot. At 12:04pm, the police established visual contact with the gunman in the inner court, but he ran back inside.

Between 12:15 and 12:30pm, the police started to secure the school building from the inside. This was completed by 3:40pm. While securing the building, the police also had

to consider the possibility that the gunman or gunmen had escaped to outside the school centre area.

For the 13 people who were injured, medical care went according to plan. The evacuees were taken to the Parish Centre and to another school, nearby.

The police were in charge of the operation and managed to keep it under control. Rescue Department and emergency medical care personnel also took part in the operation and were in readiness to respond when required to do so. The Rescue Department deployed a command unit to the scene to facilitate communications and coordinate the activities of the various authorities. The site plan and floor plans available to the Rescue Services would probably have been useful in planning the operation and forming an overview of the sprawling school building. However, as the police entered the building, they were able to utilise a floor plan they found on a wall inside.

The first police bulletin was issued about an hour after the first emergency call, with additional bulletins containing contact information following after half an hour, then an hour later, at 1:50pm. The next bulletin, informing the media of the scheduled press conference, was issued at 4pm. The conference was eventually held at 6pm. More information could have been made available on the number of victims, the operation, and the situation in general during the afternoon. It seems that the strict criteria set for official crisis communications were not met in all respects.

Conclusion 4

Securing the sprawling building, which, despite protective equipment, was a highly dangerous assignment, was handled very well by the police. The victims might have been found sooner if the evacuees had been interviewed for any information they had on their location. However, it was justifiable to enter the school at the point where the gunman had last been seen. In any event, no casualties could have been avoided with respect to this matter, even if the authorities had been able to take action sooner.

Conclusion 5

There was actually very little for Emergency Medical Services and Rescue Department personnel to do on the scene, and no problems became evident. The situation would undoubtedly have been more demanding for the authorities if there had been a fire or if it had been necessary to rescue injured people from the danger zone. Only a few Rescue Department units were on the scene in the initial stages.

The Rescue Department had accurate data on the building (via an information sheet for rescue operations), but this information was not available to the police as they prepared to enter the building and eventually did so.

Conclusion 6

From the Rescue Services' and Emergency Medical Services' perspective, co-operation with the police was not seamless. The available call groups were not utilised, and there were communication problems. Media liaison work also suffered from a lack of co-

ordination. The authorities did not have joint plans for a situation like this, and cooperation training was insufficient.

Conclusion 7

In a shooting incident, the authorities' primary duty is to organise a rescue operation and prevent damage. They are also responsible for media liaison work in a crisis situation, with the police carrying primary responsibility. The police could have provided the media with more information, sooner. This would have met the needs of the media better and satisfied the public's need for information. Better preparedness for media liaison work in a crisis would improve the situation. Better flow of information would have made it easier for the authorities to prepare the necessary instructions for schools, for example.

Victim identification and informing the families

Victim identification was carried out by the National Bureau of Investigation Victim Identification Unit, which specialises in victim identification in accidents and disasters involving multiple victims both in Finland and abroad. The purpose of identification is to establish each victim's identity beyond all doubt, which usually involves the use of dental records.

The victims' families had heard about the shooting incident early on and may have surmised that their loved one had been killed, after they could not get in touch with him or her. Many families felt that they were not told of their loved one's fate early enough and that they had not been properly looked after.

Many people had seen who had been shot, and a list of the missing persons was available. It would have been possible for the police to gather together those whose loved one was missing and provide them with the information they needed. The families could perhaps have been given a preliminary report of their loved one's likely demise earlier. The families found the situation extremely agonising, as they did not know what to do or to whom to turn

However, the actual identification had to be performed systematically and according to standard procedure in order to establish each victim's identity beyond all doubt. Visual identification is notoriously unreliable, especially when it has to be performed on the basis of photographs. Especially in a situation such as this, it was out of the question to ask those involved in the incident to identify victims.

The police had sufficient resources to identify the victims reliably, and this work was performed well. A police officer, in most cases assisted by a pastor, personally delivered the sad news to families via home visits. A family contact person was appointed for each family to assist and support them. Families were informed as soon as identities were established and the families' contact data became available. This took some time, and the last message was delivered at approximately 3am.

Conclusion 8

Victim identification was performed thoroughly and reliably, which meant that it took a relatively long time to complete. Misidentification and informing the wrong family of a loved one's demise would be unforgivable in a situation like this. The current practice wherein a police officer and a supporting person deliver the sad news works well. Before delivery of the sad news, however, the families' urgent need for information should be addressed. If possible, the families should be informed as soon as a victim's identity is tentatively established.

Acquisition of the firearm

In August 2007, the perpetrator went to practice firing a gun on a shooting range and joined a shooting club. On these grounds, he was granted a purchase and possession permit for a firearm in October 2007. Having obtained the permit, the perpetrator purchased a gun and ammunition and went to the woods to practise shooting, with an apple as his target.

The permit authority or local police initially rejected his application for a 9-mm gun as it was deemed too powerful for its purpose, target shooting. The police were right in rejecting the application for a 9-mm weapon and acted in a manner promoting security. Likewise, the police acted legally in granting the perpetrator a permit for a .22-calibre weapon. The authority granting the permit did not meet the applicant personally, but, according to contemporary legislation, delivering the application to the Police Department was sufficient. A medical certificate was not required, as there was nothing in the application process to indicate that one might be needed. This was also in accordance with contemporary legislation and instructions.

Conclusion 9

It was relatively easy for the perpetrator to obtain a purchase and possession permit for a firearm, which was granted in accordance with contemporary legislation and practice. A firearm has been employed in all school killings, without exception. Making the acquisition of firearms – and of handguns in particular – more difficult would have a preventive effect on school killings.

Bullying

According to the perpetrator and his parents, the perpetrator had been bullied at school since lower-level comprehensive school and this had continued even in upper secondary school. Some pupils and teachers also reported that the perpetrator was bullied, which was also known to the school nurse and doctor. The perpetrator's parents had been worried about this and contacted the school many times. The parents and the school, however, never really saw eye to eye here, and it seems that the situation was never resolved. The perpetrator obviously suffered because of the bullying, which made him more isolated and caused pressure.

Bullying is a complex phenomenon and may, for the bully and victim alike, have its roots in family relationships and childhood experiences. It should be actively combated through preventive measures, immediate intervention, and follow-up monitoring. The

personnel in schools and day-care centres are in a key position, as it is in these institutions that the bullies, the victims and teachers, and other professional staff meet on a daily basis. For bullying to be dealt with effectively, it is necessary for the families to co-operate and take an active role in solving the problem.

Conclusion 10

The perpetrator had been the target of bullying for several years, and some intervention measures had been taken to stop it. Bullying must be actively and systematically prevented, and intervention is important even if the incident seems insignificant. An example of this approach is the KiVa School Project. A policy of zero tolerance should be adopted all the way from day-care centres to adulthood.

Health-care services and the perpetrator's state of health

The resources available for school and student health care at the Jokela School Centre were well below the Ministry of Social Affairs and Health's recommended levels. Many Finnish municipalities face the same situation. The recommendations provided by the Ministry of Social Affairs and Health have not been followed. The National Audit Office of Finland and the Deputy Chancellor of Justice have also drawn attention in their reports to the lack of necessary resources for school health care.

The SSRI medication prescribed for the perpetrator is not recommended for minors. If such medication is, however, prescribed, the follow-up should be intensive and the patient should visit the doctor in person. When the perpetrator's symptoms became prolonged, he was not referred to specialised health care, as his problems were deemed mild. It is important to provide comprehensive care for a patient. To accomplish this, it is necessary to draw up a treatment plan to monitor the patient's condition and to evaluate the effects of the treatment. This would provide the authorities with a necessary tool to evaluate the need for specialised health care or intensified care. If necessary, the patient should be referred to student welfare, social services, or youth services authorities, for example. In the perpetrator's case, no treatment plan had been drawn up and the monitoring of the effects of his medication was inadequate.

Conclusion 11

A comprehensive treatment plan should have been drawn up for the perpetrator, to monitor his condition and to evaluate the need for any treatment in addition to the prescribed medication, or other support measures. An adolescent suffering from a mental disorder should, without delay, receive the comprehensive medical care he or she needs and, if the symptoms are persist for a long time, be referred for specialised health care.

The perpetrator's marginalisation

In many respects, the Jokela school killings were atypical as offences against life. As far as can be established, the perpetrator had no previous history of violent or any other crime. He was not drunk while committing the act and was not a substance abuser. His personality was not aggressive. The perpetrator attended upper secondary school, did

reasonably well, and did not have too many absences. The only thing that was typical was that he was male.

His parents were not divorced, and, unlike in many offences against life, the family had not been subjected to child welfare measures. They lived in a quiet low-rise residential area where people generally know each other. The perpetrator did not have many friends, and he had problems in social situations. His parents were caring. Their educational principles and demanding of good behaviour were exacting and rather absolute. Their criticism of other pupils' behaviour gave rise to some reservations about the perpetrator and his family, and it restricted interaction with his peers.

Conclusion 12

The Jokela school killings were highly atypical as an act of violent juvenile delinquency. The marginalisation of the perpetrator departed in many respects from the usual pattern. There are several parallels with school killings abroad.

The Internet and computer games

The perpetrator spent most of his leisure time at home, sitting for hours at his computer. He visited various Web sites to find information on the things that interested him, participated in a discussion forum on the Internet, submitted data to a Web-based encyclopaedia, and played Web games.

The games he played were popular strategy and war games, many of which were shooting games that required strategic and teamwork skills. The effect of games on an individual vary considerably, which makes studying them particularly challenging. Computer games, including shooting games, do have positive effects. Among the negative effects are becoming accustomed to seeing violence, identification with the perpetrator instead of the victim, increased aggressiveness, and narrowing of the social spectrum as the child or young person spends more and more time playing computer games.

The perpetrator searched the Internet for information on school killings and was particularly interested in the Columbine school killings. He found like-minded company in a discussion forum that was named after the perpetrators of the 1999 Columbine school killings. There were about a dozen members in this community, whose favourite topic was school killings. The perpetrator got to know the members well and also engaged in private online discussions with some of them.

Conclusion 13

The perpetrator was lonely and had difficulties in social interaction. The people he spoke with were mainly Net acquaintances, although he did have some friends at school.

Conclusion 14

On the Internet, the perpetrator found the models for carrying out the school killings, was exposed to the motives of previous school killers, and engaged in discussions with

like-minded people to develop his ideas further. He also uploaded video clips and published his manifesto on the Internet. The Internet was used in both planning and implementing the act, and it generally played an important role in relation to the act.

Conclusion 15

There was nothing unusual or exceptional about the computer games the perpetrator played. Apart from school killings, he also referred to shooting games in his writings. Playing computer games may have had a detrimental effect on the perpetrator.

Pupil and student welfare

The action taken by the Pupil and Student Welfare Team at the Jokela School Centre was not sufficient in relation to the perpetrator. One of the factors restricting the activities of the team is that it has no formal power of decision. That no minutes are kept of the meetings makes the team's work more difficult, and there is considerable variation in how pupil and student welfare is organised and minutes kept. There are no statutes covering keeping of minutes.

Work and open discussion in pupil and student welfare teams are hampered by confidentiality rules, which involve different laws, apply and cite different grounds, and are open to interpretation. This makes it more difficult for the team to work and act in the interests of the pupil or student. In the last few months before the incident, communication between the school and parents was handicapped by the fact that once a student turns 18, the school is not allowed to discuss his or her matters with the parents without that student's consent.

Pupil and student welfare needs to be developed further to facilitate the prevention of problems as well as their early identification and intervention.

Conclusion 16

At their worst, adolescents' social and mental health problems can lead to marginalisation, long-term pressure and anxiety, violence, and problems for the whole school community. The work methods of pupil and student welfare teams should be developed further to ensure early intervention and multidisciplinary support.

Conclusion 17

The action taken by the pupil and student welfare team at the Jokela School Centre was not sufficient in relation to the perpetrator. The lack of minutes was probably among the reasons for the team not taking the necessary action or applying sufficient intervention measures.

Conclusion 18

The work of pupil and student welfare teams in schools is handicapped by the various members being subject to different confidentiality statutes, which are sometimes difficult to interpret. The work is further hampered by the school's inability to discuss the matters of a student who has turned 18 with his or her parents without that student's

consent. There also seems to be some uncertainty as to what kind of co-operation is possible with the police.

Communality in Jokela Upper Secondary School

The perpetrator attended both upper-level comprehensive and upper secondary school at the Jokela School Centre. Jokela Upper Secondary School is a neighbourhood school where the students and teachers know each other well. In spite of the non-graded curriculum, students attend most lessons in the same group.

Conclusion 19

A spirit of communality seems to have prevailed in Jokela Upper Secondary School. Bullying did, however, occur in the school, and there was tension in the work atmosphere.

Identification of threats in schools

Since the Jokela and, in particular, Kauhajoki school killings, many schools have received threats. These have been both direct and indirect. Some were written on school furniture and others published on the Internet. There have also been various threatening videos. Sometimes teachers or other students become concerned even if a student has not behaved threateningly. In these situations, early intervention is essential, but for the intervention to be effective there has to be a plan and a procedure for carrying out the necessary measures.

In the Jokela case, the perpetrator shared some of his thoughts on school killings with his schoolmates – drawing some pictures related to the subject, for example. In the last few months before the incident, he also behaved threateningly to such an extent that a youth worker deemed it necessary to try to intervene. In his discussions with the youth worker, the perpetrator did not, however, specify his plans; the threats were more general in nature. In Internet discussions, he did mention his intention of killing people at school, but this was in the context of a general discussion on school killings.

In many school killings abroad, there was a triggering event that finally prompted the perpetrator to implement his plan. In the Jokela incident, this may have been the perpetrator's break-up with his Internet girlfriend and his subsequent embitterment and humiliation in the eyes of a small Internet community. The perpetrator's disappointment may have incited him to carry out his plan.

Conclusion 20

The perpetrator's behaviour prior to the incident suggested that he was planning to kill, but, in the light of previous experience, this was not interpreted correctly as indicative of a criminal act. Similar signs have been observed before school killings abroad. The correct identification of these signs and early intervention are the key measures for preventing a potential perpetrator from actually committing the act.

Conclusion 21

In the six months prior to the incident, the perpetrator's behaviour started to arouse concern in his parents and in other youngsters. A youth worker, for instance, is in a position to determine the nature of a youngster's problems and to refer him or her to multidisciplinary care. Therefore, co-operation among school, social services, and youth services personnel is of great importance.

Conclusion 22

Systematic risk assessment and rapid response are essential in early and efficient intervention. Immediate threats are dealt with by the police. To facilitate intervention at school, an intervention protocol should be included in the school Crisis Plan, for example. The security analysis developed in Germany is one such protocol.

Management of Internet content

At present, there is hardly anything to prevent an individual from planning an act such as a school killing quite freely on the Internet, where peer support is also readily available. It is easy to become alienated from the real world amid the virtual world of the Internet. There are no media comparable to the Internet when an individual is trying to find information and peer support for his or her ideas or plans.

Some Web sites are moderated; i.e., the content is monitored by the administrator. In some services, the content is moderated in advance, whereas other services do this afterwards. In the latter case, inappropriate content generally is reported by the users.

The legislation governing electronic communications is diverse and scattered across various laws. Special legislation concerning certain operators and facets of communication has been introduced to address this problem. In principle, the legislation that governs more traditional activities also applies to the Internet. However, the amount of material on the Web is so vast that organised and systematic surveillance is impossible. Surveillance of Internet content is further complicated by the differences in legislation between various countries.

The administrators of Web communities and discussion forums are not legally responsible for the content on their sites. Some communities have clearly defined rules, any breach of which is dealt with promptly. In many communities, though, there is no regulation whatsoever.

The administrators of these sites should acknowledge their responsibility and understand the necessity of moderation and editing. Although the number of postings on the Internet is immense, it is still possible to monitor them through efficient reporting systems. For example, YouTube employs a system allowing users to report a video as inappropriate, illegal, or threatening. This way, it is possible to moderate even a Net community as large as YouTube relatively systematically. This action is voluntary, so moderation is not a liability for the users. This is very important, as it is impossible to detect all inappropriate content.

Conclusion 23

Each Internet community should play an active role in determining the kind of media environment the Internet will turn out to be. It would be useful to develop a code of practice for all electronic communications, to enable administrators to regulate moderation more systematically. It is also necessary to develop a system for moderators' use to report their observations of potentially serious criminal activity to the authorities.

Conclusion 24

Internet users should be encouraged to take a more active role in moderation of discussion forums. They should be urged to report any inappropriate material to the administrator or, if necessary, the police. Existing reporting systems should be developed further and extended.

Psychosocial after-care

The incident created great demand for psychosocial support in Jokela for years to come. Various organisations were able to provide acute crisis relief rapidly, and the number of crisis workers and available facilities has been sufficient fairly long after the incident as well. The costs incurred in the psychosocial support were considerable and were divided among numerous authorities.

It is extremely important for the know-how and experience accumulated in such aftercare to be utilised also in preparing the authorities for similar crises, in all of Finland.

Conclusion 25

The need for substantial support in a crisis like this is obvious, and considerable resources are needed to meet it. In this case, the necessary resources were available. To reach a satisfactory end result, all authorities should concentrate on providing support for the municipal organisation. The victims' families did not receive the necessary support in relation to legal and practical issues.

The conduct of the media

In the Jokela incident, new kinds of problems were created by Web publication and its constant demand for speed and news updates, the increased publication space provided by the Internet, and journalists' focus on a single event. These factors were partially responsible for the pressure to publish as much as possible and as soon as possible, at the expense of accuracy and discretion. The journalists and reporters were swept away by the heady atmosphere of the crisis, and international trauma response guides and media companies' codes of ethics were soon forgotten.

The biggest problem was not so much the published material as the lengths the journalists went to in trying to secure that all-important interview or other material. Young people in Jokela were particularly bewildered by the massive media attack launched on them. Journalists should know better than to rush to interview the same

person all at the same time. The media conducted themselves with considerably more discretion when covering the Kauhajoki school killings, in 2008.

Interviewing panic-stricken students and exposing people's naked distress and grief was not in accordance with good media ethics. Although most of the photographs were never published, the youngsters found the mere act of photographing them in the crisis distressing. There has been a change in attitudes towards stepping into an individual's private area of grief. As a result, people want to protect their privacy better than in the past. The decisions of the European Court of Human Rights, based on articles 8 and 10 of the European Convention on Human Rights, are parallel to the general code of ethics. In addition to the freedom of speech, they emphasise the right to privacy and restrictions on the extent to which it is appropriate to show victims' sufferings to the public. The European Convention on Human Rights and the decisions of the European Court of Human Rights apply to Finland.

The Council for Mass Media could have made a statement on the conduct of the media in relation to the Jokela incident. This would have made public the journalists' own view of their conduct and that they also need to practise self-regulation.

Conclusion 26

The perpetrator's wish to receive a lot of publicity in the media was fulfilled.

Conclusion 27

It was generally felt that the media behaved aggressively in Jokela, which was partly due to the large number of media representatives present. The methods employed by the media did not always respect the suffering and privacy of Jokela residents. The 'Guidelines for Journalists' material forms a solid basis for proper journalistic behaviour. The media should, however, consider updating the guidelines and implementing them more extensively.

Investigation of serious offences, to improve security

As the Accident Investigation Act is not directly applicable to criminal investigation, a separate statute was enacted for investigation of the Jokela and Kauhajoki school killings.

Conclusion 28

More systematic information is needed on offences against life, such as school killings, and possibly other offences with social significance. Their prevention should be efficient and involve co-operation among various administrative sectors. More data would be available if a comprehensive investigation aimed at improving general security were carried out in relation to more serious offences. The documentation of the incident and its background alone is valuable.

6 MEASURES TAKEN

By January 2009, the following measures had been taken in the wake of the Jokela and Kauhajoki incidents:

School safety training in 2008

In co-operation with State Provincial Offices, the National Board of Education organised 14 training sessions, which were held in different parts of Finland, 11 of them in Finnish and three in Swedish. The theme in these sessions was safety and crisis preparedness in schools and other educational institutions. The training was attended by experts from education and culture departments, Social Welfare and Health Care Services, Rescue Services, and the police. Head teachers, teaching staff, and student welfare personnel from various schools and other educational institutions were present also. The training was free and open to all educational institutions, but the majority of the participants represented basic education, upper secondary schools, and some vocational institutions. In total, approximately 2,000 people attended the training sessions. This was the first step in a long-term training project that aims at increasing safety awareness and skills as well as preparedness for hazards and crises in educational institutions.

Emergency medical care conference in 2008

One of the themes for the Emergency Medical Services Conference held at the Emergency Services College in May 2008 was the Jokela school shooting and lessons learned from it. The conference were attended by emergency medical care personnel, acute medicine and acute care personnel, rescue personnel, police personnel, Emergency Response Centre operators, and crisis workers.

Youth services training sessions

The Ministry of Education has made an agreement with Finnish Youth Co-operation Organisation Allianssi whereby the latter will organise local crisis work training for municipal youth services personnel. Various youth work organisations will be involved also. The training, to be organised in co-operation with provincial youth services workers during 2009, will be provided by crisis work professionals in charge of Jokela incident after-care.

Development of pupil welfare

In May 2007, the Ministry of Education granted one hundred municipalities approximately €1.6 million in special grants to develop the quality and service structure of pupil welfare in pre-primary and basic education. In June 2008, the National Board of Education granted 92 municipalities approximately €1.3 million to solidify the development project and to extend it to upper secondary schools. In addition, starting in early 2009, the National Board of Education will grant €2.4 million in special grants to those municipalities that are not yet involved in the projects mentioned above. The emphasis is on multidisciplinary co-operation involving various administrative bodies, organisations, and levels of education, and the participants include pre-primary, basic, and upper secondary school staff as well as municipal education, social, and health-care services personnel. The key objective is to improve the availability of pupil welfare services and to create new preventive methods to ensure the well-being of children and

adolescents. The pupil and student welfare development project initiated earlier is similar in content and objectives and covers all levels of general education.

The Minister of Social Affairs and Health and the Minister of Education appointed a pupil and student welfare working group in December 2008. This working group will continue the work of a group appointed in 2006.

Prevention of school bullying

Between 2006 and 2009, more than 30,000 children and adolescents all over Finland will have participated in the development of the KiVa School Project, initiated by the Ministry of Education in 2006. In addition to individual pupils, the measures included in the KiVa School Project are aimed at the grade and school level, and at parents. A separate set of measures, set forth in both Finnish and Swedish, will be compiled in the programme for years 1–3, 4–6, and 7–9. The KiVa School Project includes various measures to prevent bullying, for effective intervention in it, and covers in-service training. A decision has been made to launch the KiVa School Project in basic education on a national level by 2010.

Preparation of a decree concerning school and student health care

A government decree concerning Child and Family Guidance Centre facilities, school and student health care, and preventive dental health care for children and adolescents (Ministry of Social Affairs and Health Publications 2008:37) is under preparation in the Ministry of Social Affairs and Health. The decree is scheduled to become effective on 1st July 2009. It provides for health education, medical examinations, and student health care. It also provides for identifying the need for special support and organising that support. Identifying this need is an important tool in addressing children's, adolescents', and parents' mental health problems and bullying.

Act on Health Care in preparation

A law, the Act on Health Care, is currently in preparation that on becoming effective will supersede the current Primary Care Act and the Act on Specialised Medical Care (Ministry of Social Affairs and Health Publications 2008:28). The bill will be submitted to Parliament during the 2010 spring session and will address, for example, school and student health care, mental health work, medical rehabilitation, regional health-care preparedness, emergency planning, and re-organisation of emergency medical service systema.

Emergency Planning Guide for Social Services

The Emergency Planning Guide for Social Services was recently published by the Ministry of Social Affairs and Health (Ministry of Social Affairs and Health Publications 2008:12). This guide provides the municipal social services with basic information on preparation for a crisis and drafting of an emergency plan for unexpected and exceptional situations.

Media Forum for Children and Adolescents

In February 2008, the Ministry of Transport and Communications designated a 'Media Forum for Children and Adolescents'. The forum comprises experts, and its term will run till the end of 2010. The purposes of the forum are to assess the role of the Internet

and the media in children's and adolescents' everyday life, to provide them with the necessary skills to operate in an electronic media environment, and to find ways of reducing the harmful effects of electronic communications on children and adolescents. Another aim is to find ways to intervene in the publication of harmful media and Internet content and to prevent its distribution.

The forum also aims at promoting adolescents' media skills and literacy, developing self-regulation in media and Internet communities, and initiating discourse on renewed legislation. The forum's objectives also include creating a more open policy, raising awareness, and promoting co-operation between authorities. The forum brings various authorities together to share information and to find solutions to current problems.

Online youth work

The Ministry of Education, the Ministry of Social Affairs and Health, and the Ministry of Transport and Communications are jointly involved in promoting online youth work. The Netari.fi project was launched by the City of Helsinki Youth Department in 2008. The 2009 Ministry of Education sub-moment includes allocation of €500,000 for use to bring the Netari project to a national level.

The objective of online youth work is to reach out to those adolescents who spend most of their time in various Internet environments. The aim is to provide these adolescents with a link with youth work professionals and to give them the support and advice they need. Naturally, online youth work will not replace the personal contacts of traditional youth work; rather, it is to be used as a supplementary measure.

In early 2009, an online nurse and online police officer were introduced to Netari. There are plans to initiate co-operation with Social Services. In spring 2009, Netari online youth work is being performed in two popular network environments, Habbo and IRC-Galleria. The Habbo Netari room is open four evenings a week and the IRC-Galleria Netari Chat on three.

The second Internal Security Programme

The government launched the second Internal Security Programme in May 2008. Preparations for the programme had been initiated in August 2007. On a general level, the objective of the second programme is the same as that of the first: 'Finland will be the safest country in Europe in 2015'. The programme was prepared jointly by various administrative sectors and, like the first programme, outlines the key areas for development, the objectives, and the measures to be taken. The objectives were made more concrete through definition of key parameters and indicators to help authorities monitor the progress of the programme.

Marginalisation is still considered the most serious threat to internal security. Other challenges include accidents, especially at home and in leisure activities; tensions between ethnic groups; violence; disasters and catastrophes; the vulnerability of society, especially in terms of technological systems; organised international crime; communications network crime; and terrorism.

Among the measures to be taken to prevent marginalisation are the promotion of village activities and the extension of youth workshop activities. Both are aimed at promoting communality. The programme also endeavours to develop the study of internal security; situation reports; local safety planning through preparation of safety plans; and measures to ensure safety at home, in leisure activities, and in sports. The programme includes measures geared for reducing violence, preventing communications network crime, and diminishing the risks involved in use of the Internet.

The execution of the programme is supervised and monitored by the Internal Security Ministerial Management Group. Having such a management group makes both cooperation between administrative sectors and decision-making more effective in relation to matters of internal security. The Internal Security Ministerial Management Group made its decision to include the special measures in the Internal Security Programme after the Kauhajoki school shooting, in 2008.

Improving safety in educational institutions

A joint working group commissioned by the Ministry of Education, the Ministry of Social Affairs and Health, and the Ministry of the Interior started its work in January 2009. The task of this group is to prepare proposals to improve safety in educational institutions. The group, whose work is based on the decision of the Internal Security Ministerial Management Group, includes representatives from the National Board of Education, the Association of Finnish Local and Regional Authorities, rescue departments, the Finnish Red Cross, and the Rescue Services Central Organisation in Finland. The mission of the working group is to draw up instructions on complementing the rescue plans of educational institutions so that they are prepared for crises like the Jokela and Kauhajoki shootings. Another set of instructions to be drawn up by the group will provide the authorities with instructions on how to respond to a threat against an educational institution and how to discuss such situations in educational institutions and with parents. The working group is also responsible for the implementation of the instructions and training. The work is scheduled to be completed by August 2009.

Basic-education safety diploma in preparation

One of the objectives of the Internal Security Programme is that every pupil attend a safety diploma course as part of his or her basic education. The diploma provides the pupil with the necessary skills to assess everyday risks and to take appropriate action in an accident. The diploma is part of safety education for children and adolescents. A steering group was appointed to prepare the introduction of the Safety Diploma. The three-year term of the group began on 1 January 2009.

Granting of firearm permits

On 16th October 2007, the Ministry of the Interior issued new instructions to standardise the procedure for granting possession permits for firearms. Thus these instructions were not yet effective when the perpetrator of the Jokela school killings was granted a possession permit. The assessment of the applicant's suitability and the suitability and purpose of the firearm are some of the points emphasised in the instructions.

The instructions make it clear that it is absolutely necessary to interview the applicant if he or she is applying for a permit for the first time or if the application is for a handgun. The instructions are very specific about what is to be determined in the interview. One of the purposes of the interview is to evaluate the applicant's state of health. If there are any doubts concerning this issue, the applicant is referred for another interview, to be conducted by an officer. If necessary, the applicant may be requested to deliver a medical certificate on his or her state of health.

A training session concerning the new instructions had been organised for every province by the end of February 2008. In spring 2008, the officials presenting and making decisions on permits received training in interviewing applicants. The personnel handling firearm permits received training in handling weapons.

The Ministry of the Interior supplemented the instructions on 29 September 2008 and 14 October 2008. On 6th November 2008, the Ministry of Social Affairs and Health issued new instructions for doctors on writing a medical certificate for a person applying for a firearm permit. These instructions amended the previous rules on the applicant's obligation to deliver a medical certificate, the mandatory interview in first-time application for a permit, and the applicant's obligation to show that the firearm is for recreational shooting. According to the instructions, everyone applying for a handgun permit for the first time must be interviewed by two officials.

Furthermore, permits are not to be granted for pistols, small-calibre pistols, revolvers, or small-calibre revolvers as the first weapon. Instead, these weapons should be used only under supervision at shooting clubs. Even when one is applying for the first time, a purchase permit may be granted if the applicant has shown that he or she has been engaged in recreational shooting for at least a year. A possession permit for a pistol, small-calibre pistol, revolver, or small-calibre revolver must always be for a fixed term. For the applicant's first pistol, small-calibre pistol, revolver, or small-calibre revolver, the permit must be for a maximum of three years. Before a permit is granted, the permit authority is under obligation to request the applicant to submit a medical certificate as to his or her state of health. The instructions also specify how to determine that a firearm is suitable for the stated purpose.

The effects of the new instructions are being monitored by a working group, which published an intermediate report in November 2008. A final report is due by the end of 2009.

A substantial two-year reform project concerning the Firearms Registry and the Security Industry Registry is under way, with over €1 million allocated to it in the 2009 budget.

Firearms legislation reform

A project to reform firearms legislation was initiated on 29 September 2008. The project will be carried out in two stages, with the first concentrating on setting more stringent conditions for firearm permits, monitoring the applicants' state of health more carefully, ratifying the UN Firearms Protocol in Finland, and dealing with the amendments to firearms legislation necessitated by the Proposal for the Directive of the European Parliament and of the Council amending Council Directive 91/447/EEC on

control of the acquisition and possession of weapons. The directive necessitates the amendment of Finnish legislation such that, in the future, a minor may be granted only a parallel permit for a firearm in the possession of another person.

Police Internet surveillance

Before committing their act, school killers often discuss their views with like-minded community members on the Internet. They also leak information on their thoughts and plans concerning school killings. The police have started to utilise this in their preventive work through routine Internet surveillance.

After the Kauhajoki school killings, Supreme Police Command ordered the National Bureau of Investigation and other police units to perform constant Internet surveillance on a daily basis. This is aimed at detecting threats against schools and determining the identity and background of the person making the threat.

Parliament granted the police €881,500 for the organisation of Internet surveillance and prevention of criminal acts in 2009. The allocation allows the police to recruit 10 people to perform the surveillance. This will also enhance the surveillance and prevention of Web-based crime in general.

7 RECOMMENDATIONS

The Jokela school shooting was a complex and multifaceted series of events but, at the same time, a planned and deliberate criminal act. Accordingly, no single solution or measure is available for performing preventive work for school killings. Instead, several parallel preventive measures must be taken simultaneously. It is important to realise that these measures are not exclusive. Some can be implemented immediately while others will only become effective in the long term. To reduce the probability of school killings and minimise the damage caused by them, the Investigation Commission makes 13 recommendations.

In account of several factors, the marginalisation of the perpetrator of the Jokela school killings was of a special kind. Families, education, and school communities are in a key position to prevent marginalisation, but society in general and, increasingly, the Internet can also play a major part. Most of the recommendations concern prevention of marginalisation, but some address the development of the activities of the authorities and the media.

7.1 Development of pupil and student welfare

As in many other municipalities, the resources available for pupil and student welfare in Tuusula are well below the Ministry of Social Affairs and Health's recommendations. In such a situation, a pupil in danger of becoming marginalised may not receive the multidisciplinary support he or she needs or may not receive it early enough. Therefore, pupil and student welfare authorities should co-operate actively with youth services personnel, as they are in a good position to identify problems in both traditional and, increasingly, Web-based youth work.

Recommendation 1

The Ministry of Social Affairs and Health and the Ministry of Education should, through constant supervision and guidance, ensure that social welfare workers and health-care authorities as well as the authorities in charge of organising education constantly develop pupil and student welfare. The resources allocated for pupil and student welfare work should be in accordance with official recommendations. The work should be systematic, and an effort should be made to identify pupils' and students' problems as early as possible. The authorities should also ensure that the necessary support measures are always carried out. If necessary, legislative or any other action should be taken as needed.

The work of pupil and student welfare teams in schools is handicapped by the various members being subject to different confidentiality statutes, interpretation of which is sometimes difficult. The school authorities feel they cannot discuss a pupil's issues openly enough, which makes dealing with problems more difficult. Systematic, continuous work on pupil and student welfare issues is complicated also by the fact that minutes are not always kept of the meetings. The work is hampered further by the

school's inability to discuss the issues of a student who has turned 18 with his or her parents without the student's consent.

Recommendation 2

The Ministry of Social Affairs and Health and the Ministry of Education should clarify the legislation concerning confidentiality and the flow of information related to pupils' and students' welfare.

7.2 Clarification of treatment recommendations in mental health services for adolescents

The perpetrator did not receive comprehensive, appropriate, and systematic treatment for his mental health disorder. Moreover, his progress was not monitored closely enough. It seems to be a common problem in Finland that the evaluation of adolescents suffering from mental health disorders is not comprehensive enough and psychosocial treatments are not utilised often enough in their treatment to supplement medication. The positive and harmful effects of medication are not monitored systematically or assessed regularly enough. The regional meetings provided for in the Mental Health Act and the Mental Health Decree, wherein the division of labour and activities involved in basic health care, specialised health care, and social welfare are planned, are not held often enough. No Current Care Guidelines (CCGs) for anxiety disorders are yet part of the Finnish system. In general, children and young adults should be taken into account in the drawing up of CCGs. The sections of the current care recommendation for depression that concern the monitoring of medication should be clarified as a whole, not just for the initial stages of depression.

Although the SSRI medication prescribed for the perpetrator is generally not recommended for adolescents, it is not, strictly speaking, forbidden, and its use is justified in some cases. Apparently, in individual cases it may increase the risk of aggressive behaviour. There are, however, no guidelines available for the use and monitoring of SSRI medication for those cases where this type of medication is prescribed for an adolescent.

Recommendation 3

The Ministry of Social Affairs and Health should take the necessary steps to have the treatment recommendations concerning adolescent anxiety and mood disorders clarified such that the co-operation among basic health care, specialised health care, and social services personnel is as seamless as possible, to ensure that every adolescent receives the best possible treatment. Moreover, the instructions concerning anti-depressant medication for adolescents should be more specific.

7.3 Prevention of bullying

The perpetrator was a target of bullying for many years, which led to isolation and marginalisation. For bullying, the only acceptable policy is zero tolerance. The prevention of bullying requires the co-operation of parents and the whole school community. It is important to start preventive work as early as possible, preferably in early childhood education.

Recommendation 4

The Ministry of Education and the authorities responsible for organisation of education should ensure that schools actively and systematically implement the necessary measures to prevent bullying or, if necessary, to intervene early and monitor the situation closely.

7.4 More stringent firearm legislation and reduction in the number of guns

In committing his act, the perpetrator copied school killings perpetrated in the USA as described on the Internet. Relatively small-calibre firearms were employed in all of these. Some involved the use or attempted use of flammable liquids, just as the Jokela incident did.

In Finland, the number of firearms relative to the population is large. It has been fairly easy to acquire a gun, and the atmosphere has traditionally been favourable for doing so. From an internal security perspective, making the legislation concerning firearm permits more stringent and reducing the number of guns in Finland would have beneficial results. Especially dangerous are handguns that fire a great number of rounds within a short time.

It would be particularly important to grant fixed-term permits more often, to reduce the number of guns that are no longer in active use. Likewise, efforts to revoke the possession permits of those who no longer meet the conditions for a permit should be stepped up. The flow of information among various authorities should be improved to make the permit process more effective.

Recommendation 5

It is recommended that the Ministry of the Interior propose that current firearm legislation be amended to become more stringent, particularly as regards handguns. The ministry should also take steps to reduce the number of firearms in Finland significantly.

7.5 Systematic improvement of overall safety in schools

As Finnish schools in general, the Jokela School Centre was not prepared for an eventuality like this. The students and staff did not possess the ability to act rationally and systematically in this situation. The eventuality of a school shooting was not considered in the plans for the school building, and the focus was too much on other kinds of emergencies, such as fire. The risk of an incident of this nature must be taken into account in the various plans.

Recommendation 6

It is recommended that the Ministry of the Interior and the Ministry of Education provide schools with comprehensive instructions for drawing up, co-ordinating, and implementing plans to improve overall safety. The plans should include assessment and prevention of potential risks. This may require the installation of PA systems, lock systems, etc. and the drawing up of protocols for response to various threats.

7.6 Moderation of the Internet

Administrators of Web communities and discussion forums are not legally responsible for such site content. While some communities have clearly defined rules and codes of conduct, many still lack these. Administrators of Web communities and discussion forums are not required to moderate their sites (to monitor content or intervene in inappropriate behaviour).

It would be extremely useful for administrators to actively and systematically moderate their sites and intervene in any content that is inappropriate, criminal, or harmful to the community. Moderation should also include reporting any threatening or criminal content to the police. The principles governing the moderation should be public and known to all users.

Recommendation 7

The Ministry of Transport and Communications should, in co-operation with other key operators, ensure that the major Finnish Internet service providers create and implement a set of rules to allow administrators to intervene in inappropriate communication and moderate the systems as comprehensively and systematically as possible. It is also necessary to develop new systems for the moderators' use to report their observations of potentially serious criminal activity to the authorities.

7.7 The Police Tip Line Programme

One of the objectives included in the Internal Security Programme is the prevention of communications network crime and the risks involved in Internet use. One of the purposes of the programme is to review the means available to law enforcement authorities to gather information from the Internet and review the responsibility of site administrators. The programme also aims at making it easier for all involved to report any suspected or observed criminal Internet activity or other suspicious material to the police. One way to do this would be to add a special button to Web sites to allow users to contact the police directly.

Also, international co-operation among various police authorities is necessary to ensure the early identification of threats and the identification of potential perpetrators. The Internet discussion on school killings preceding the Jokela incident was mostly international. To prevent network crime and crime that can be prevented via the Internet, the Ministry of the Interior should take an active role in promoting international police co-operation.

Recommendation 8

Working with the Ministry of Transport and Communications, the Ministry of the Interior should ensure that Finnish Internet service providers employ a system that makes it considerably easier for users to report criminal activity or other suspicious material to the police.

7.8 Criminalisation of preparation to commit an offence against life

At present, preparation for the commission of an offence against life is not punishable by law. This seriously limits the means available to the police to intervene in school threats or activities connected with preparations to commit an attack against a school.

Recommendation 9

The Ministry of Justice should consider the criminalisation of preparation for the commission of an offence against life.

Recommendation 10

The Ministry of the Interior should take the necessary legislative steps to ensure that the police are provided with the appropriate means to gather information connected with plans for criminal activity on the Internet.

7.9 Development of co-operation among various authorities

The authorities with greatest involvement in the shooting incident were the police, the Rescue Services, and the Health Care Services. Crisis work personnel were soon brought to the scene as well. Some of those involved in the operation felt that the flow of information was interrupted at times and the available resources were not utilised optimally.

Recommendation 11

In co-operation with the Ministry of Social Affairs and Health, the Ministry of the Interior should develop systematic and regular co-operation among various authorities. The purpose of this co-operation is preparedness for various eventualities and co-ordination of preventive security work.

7.10 Improvement to official communications

In a shooting incident like this, the authorities' primary duty is to organise a rescue operation and prevent damage. It is, however, extremely important to ensure proper communications as part of situation management and to inform the families of those involved, the local population, and any organisations involved in the crisis in one way or another as soon as possible. In Jokela, the responsibility for media liaison work and the organisation of communications lay with the police. Prior to the press conference held six hours after the incident, the police provided the media and the public with very little information.

Communications and media liaison work should be developed such that the available information is made public regularly and often enough.

Recommendation 12

The Ministry of the Interior should develop the media liaison and communications policy for major operations further. It is of particular importance to create appropriate procedures and protocols for situations like the Jokela incident, involving various authorities, and to make them known to all who are involved.

7.11 Promotion of self-regulation in the media

In the law concerning the investigation of the Jokela incident, one of the issues to be investigated by the Investigation Commission was defined as evaluation of the conduct of the media

The conduct of the media in Jokela cannot be considered appropriate in all respects. Therefore, it is necessary to develop self-regulation of the media further. This is likely to require changes in the 'Guidelines for Journalists' material as interpreted by the Council for Mass Media and ratified by its affiliates.

All media operators should be brought to the negotiating table to agree on the rules and protocol for a crisis situation. The results of such talks should be recorded in the 'Guidelines for Journalists' materials. The media should also ensure that, regardless of the situation, the guidelines are strictly adhered to.

The public image as presented by the media after the incident seems to be very important to most school killers. The fact that they can rely on the material they publish and the act they commit receiving wide publicity may actually encourage them to commit the act. One of the reasons for the great number of school threats is the wide publicity they receive.

Recommendation 13

The affiliates of the Council for Mass Media should bring all media operators in Finland to the negotiating table to discuss the protocol to be adhered to in a crisis and how to report the events appropriately. The 'Guidelines for Journalists' material should be revised on the basis of these negotiations, and the media should ensure that appropriate protocol is followed in all circumstances.

Helsinki, 26 February 2009

Tuulikki Petäjäniem

Chairman

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Janne Koivukoski

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Robin Lardot

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State Administration working groups

Ministerial working group appointed by the Prime Minister's Office

On 14th December 2007, the Prime Minister's Office appointed a ministerial working group with the purpose of co-ordinating the activities in various administrative sectors

necessitated by the Jokela incident and improving the flow of information among the ministries involved. The group consists of officials from the Ministry of Social Affairs and Health, the Ministry of Education, the Prime Minister's Office, the Ministry of Foreign Affairs, the Ministry of Justice, the Ministry of the Interior, the Ministry of Defence, the Ministry of Finance, and the State Treasury.

Ministry of Social Affairs and Health civil servants group

On 8th November 2007, the Ministry of Social Affairs and Health appointed a Jokela civil servants group, which held a total of seven meetings. Represented in the group were the Ministry of Social Affairs and Health, the Ministry of Education, the National Public Health Institute, the Hospital District of Helsinki and Uusimaa, the National Research and Development Centre for Welfare and Health (STAKES), the National Board of Education, Tuusula Municipality, the Vantaa Social and Crisis and Emergency Centre, and the Finnish Red Cross. The group was responsible for providing the necessary support in the initial stages of the crisis and determining what kind of support and assistance would be necessary for the victims, their families, the students and staff of the Jokela School Centre, and Tuusula Municipality. They were also responsible for ensuring the necessary support for those involved in the operation and for seeing that questions of responsibility were clearly defined among the various authorities. The group was also tasked with evaluating and planning measures to reduce the children's and adolescents' distress. After the working group had completed its task, a project team was appointed to continue its work.

Ministry of Education Jokela group

This Ministry of Education working group was tasked with preparing and co-ordinating measures to support school communities and increase general safety. Represented were the Association of Finnish Local and Regional Authorities; the Trade Union of Education in Finland; the Finnish Association of Principals; the National Board of Education; the Ministry of Social Affairs and Health; the Ombudsman for Children; the leader of the Development Programme for Child and Youth Policy; and the representatives of education, youth, and communications units in vocational education. The group met a total of six times between 9 November 2007 and spring 2008.



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