



International Telecommunication Union

Current Status and Future Plan of HELP

Masatoshi Morita

Assistant Director for ITS

Traffic Planning Division, Traffic Bureau,
National Police Agency of Japan

"The Fully Networked Car, A Workshop on ICT in Vehicles"
ITU-T Geneva, 2-4 March 2005



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The purpose of the HELP

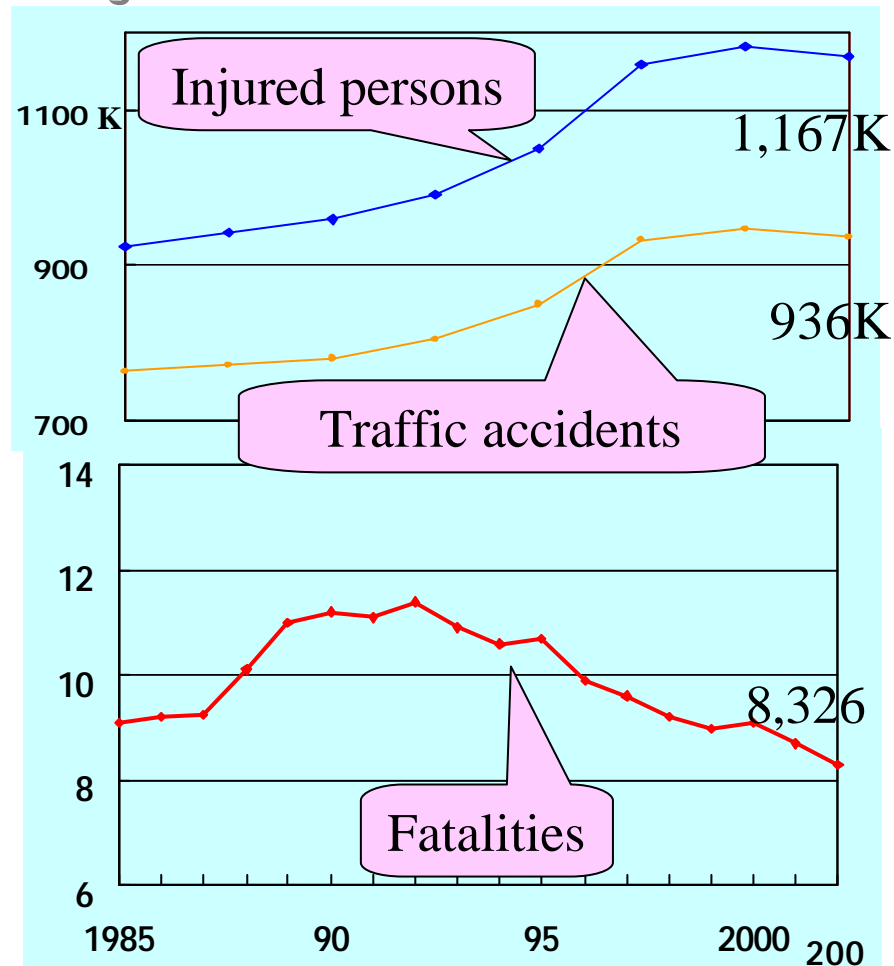
- o Safety traveling for the emergency vehicles
- o Smooth traveling for the emergency vehicles



Improve the life saving rate

Necessity of the HELP(1)

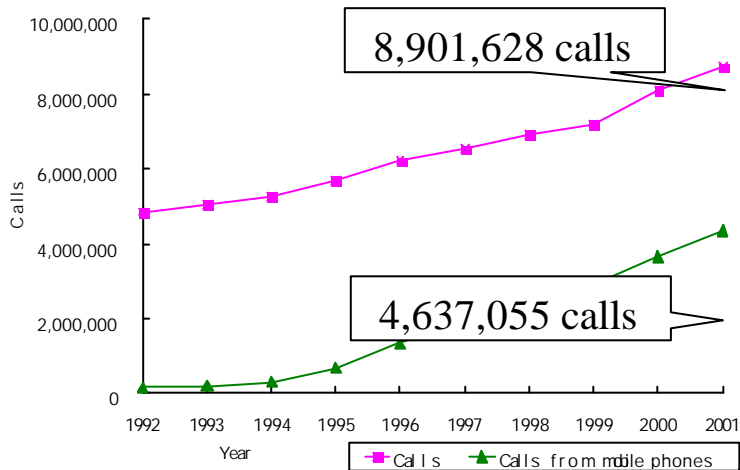
In Japan, the number of traffic accidents and injured persons is increasing, although the number of fatalities is decreasing.



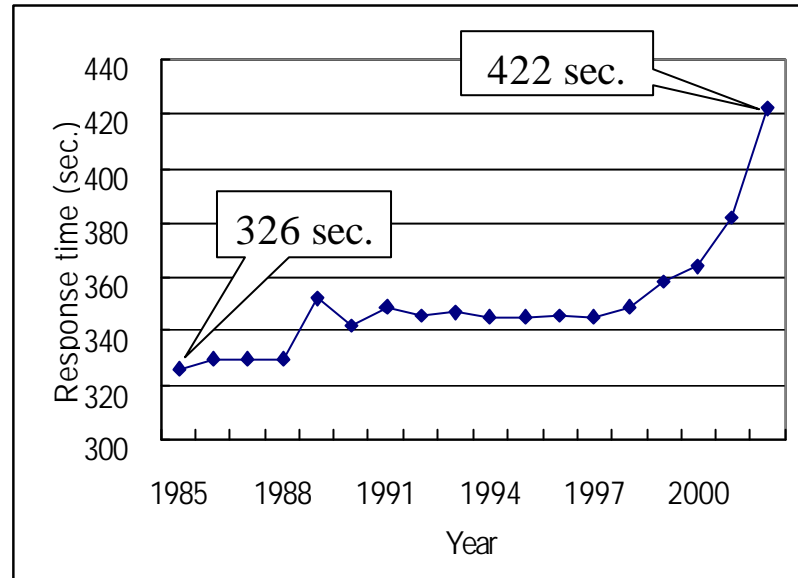
The Fully Networked Car, A Workshop on ICT in Vehicles
 ITU-T Geneva, 2-4 March 2005

Necessity of the HELP(2)

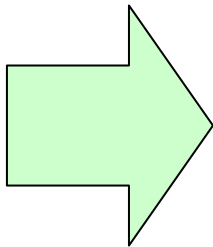
Number of "110" (police) calls and calls from cell phones



Trends of response time

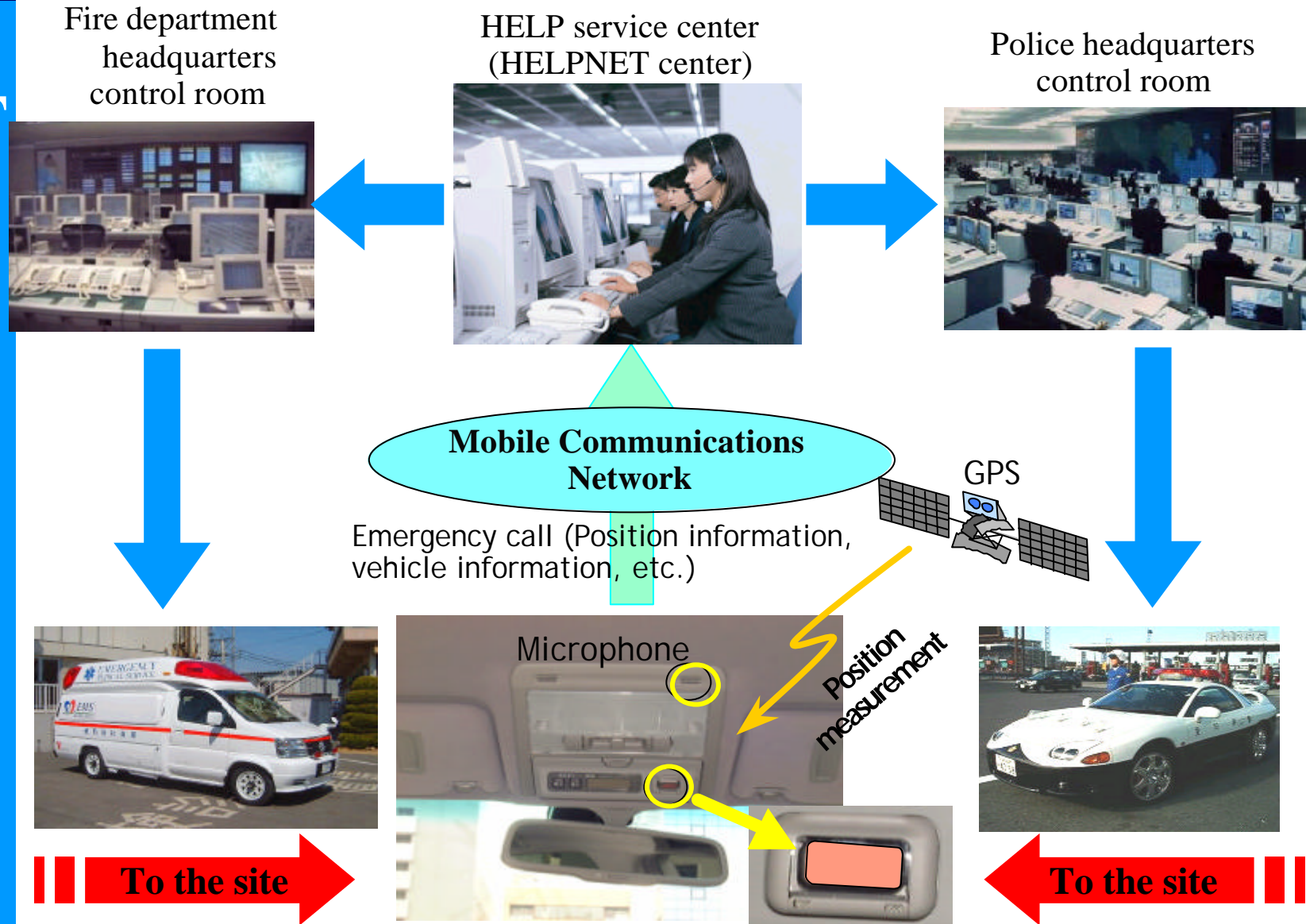


Prompt response to emergency calls
 Need to rescue traffic accident victims quickly and properly



Necessity of HELP to locate the accident site quickly and accurately

The overview of the HELP



The Fully Networked Car, A Emergency call button
 ITU-T Geneva, 2-4 March 2005

The history of HELP & HELPNET



July
▼

Sept.
▼
*Found-
ation*

Sept.
▼
*Start of helpnet
for the vehicles*

June
▼
*Start of helpnet
for cell-phones*

July
▼
*New
system*

9 ITS fields by Japanese government

- 1) Advances in navigation
- 2) Electronic toll collection
- 3) Assistance for safe driving
- 4) Traffic management
- 5) Road management
- 6) Public transport
- 7) Commercial vehicle
- 8) Support for pedestrians

9) Support for emergency vehicle operations

1997
July
▼

Establishment of "Working group for HELP" by National Police Agency and Universal Traffic Management Society of Japan

1998
Sept.
▼

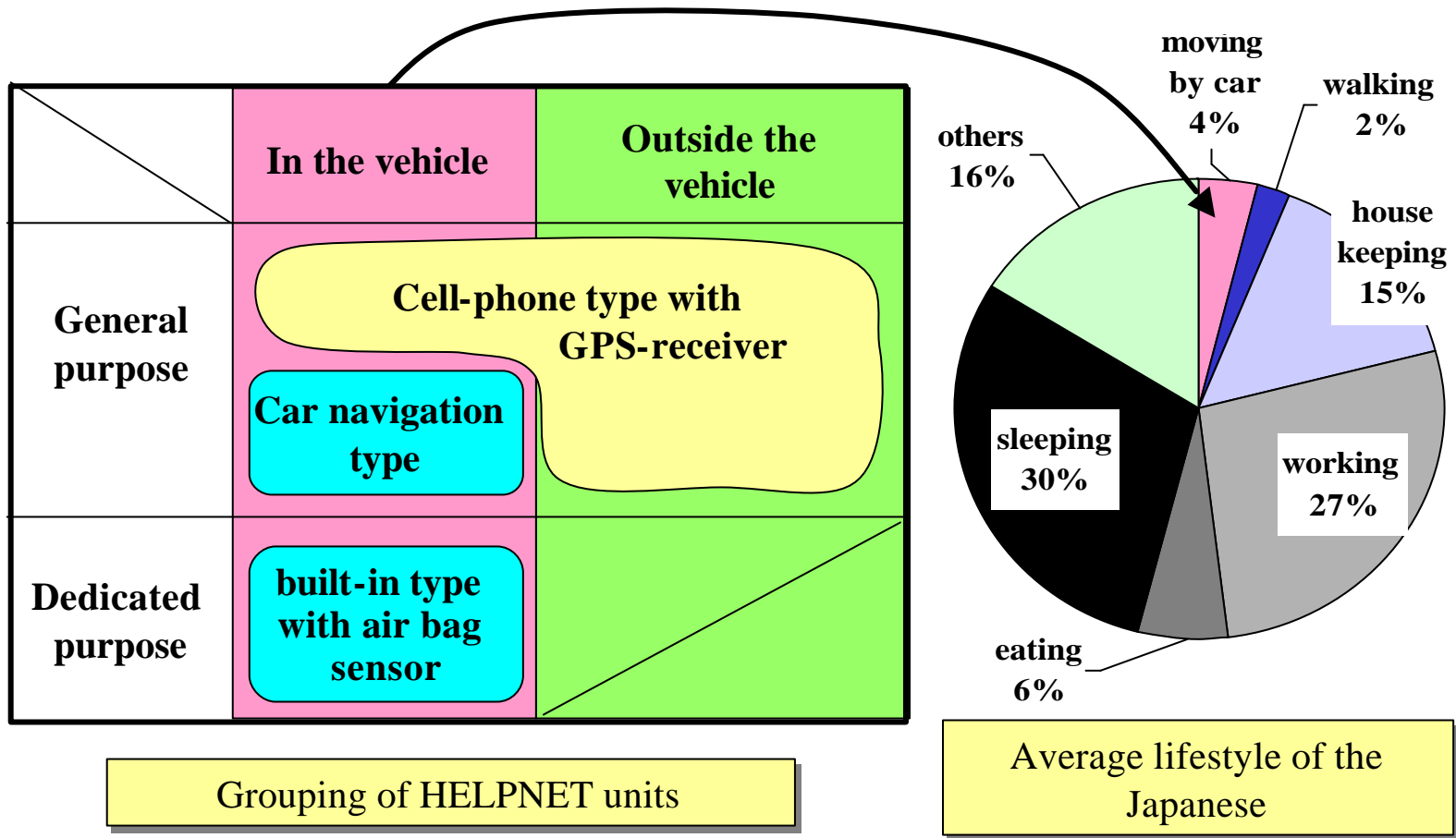
Establishment of "Committee for examination of HELPNET" by the Fire and Disaster Management Agency.



- 42 Companies**
- 8 Car makers
 - 5 Electronics makers
 - 8 Car-navigation makers
 - 6 Telephone companies
 - 8 Insurance companies
 - 3 Banks
 - 1 Security guard company

The in-vehicle units and the cell-phones

The traffic of calls from cell phones to HELPNET has been increasing.



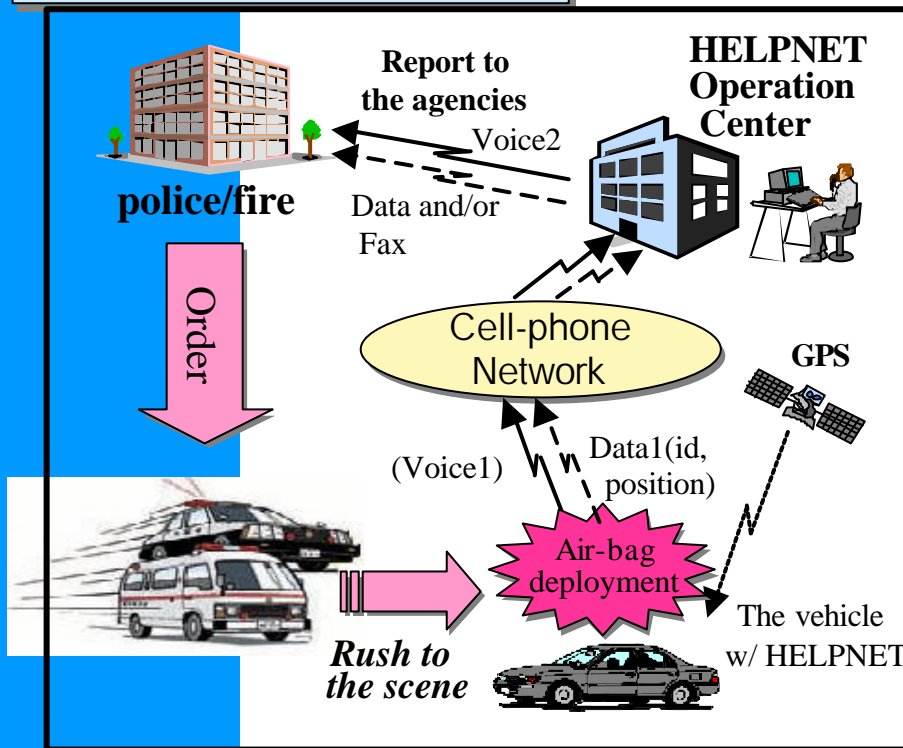
Grouping of HELPNET units

Average lifestyle of the Japanese

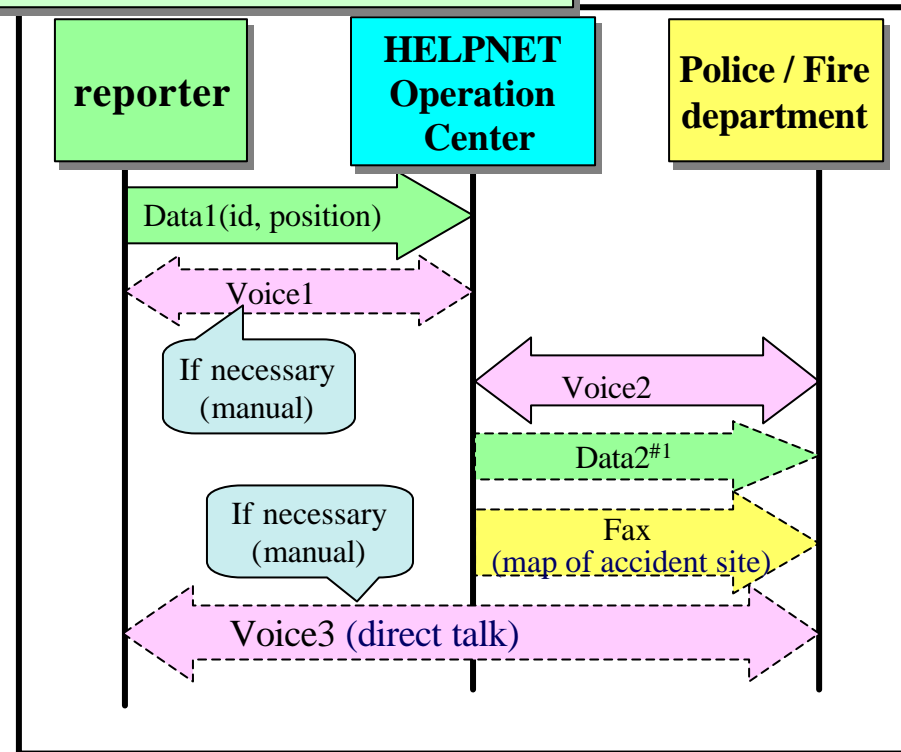
The overview of HELPNET System

The operator can easily select a proper organization based on information from the trouble site.

Mechanism of Helpnet



Sequential flow of Helpnet



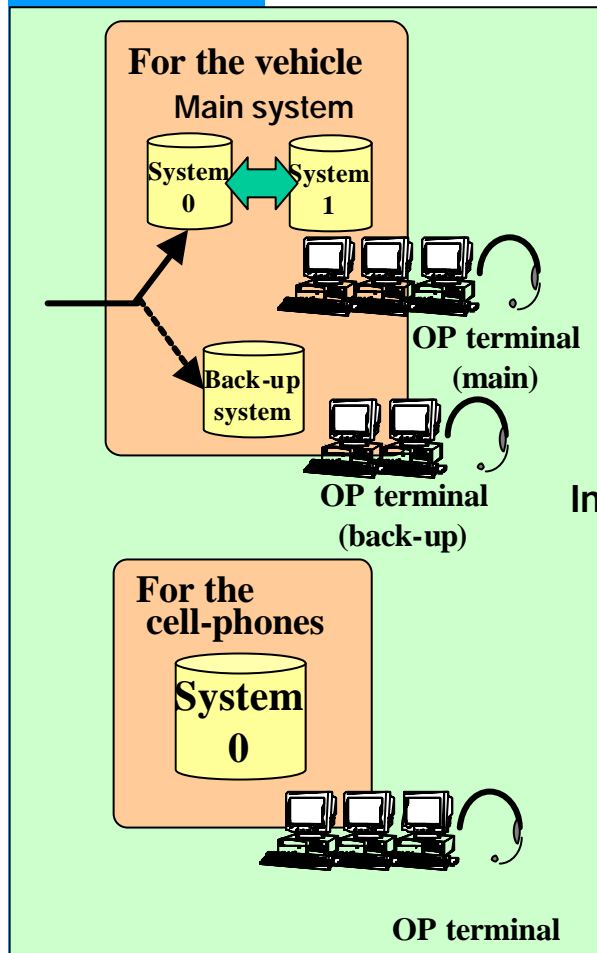
#1:Data Communication: date, location, telephone number, name, vehicle kind, vehicle color, vehicle number, etc.



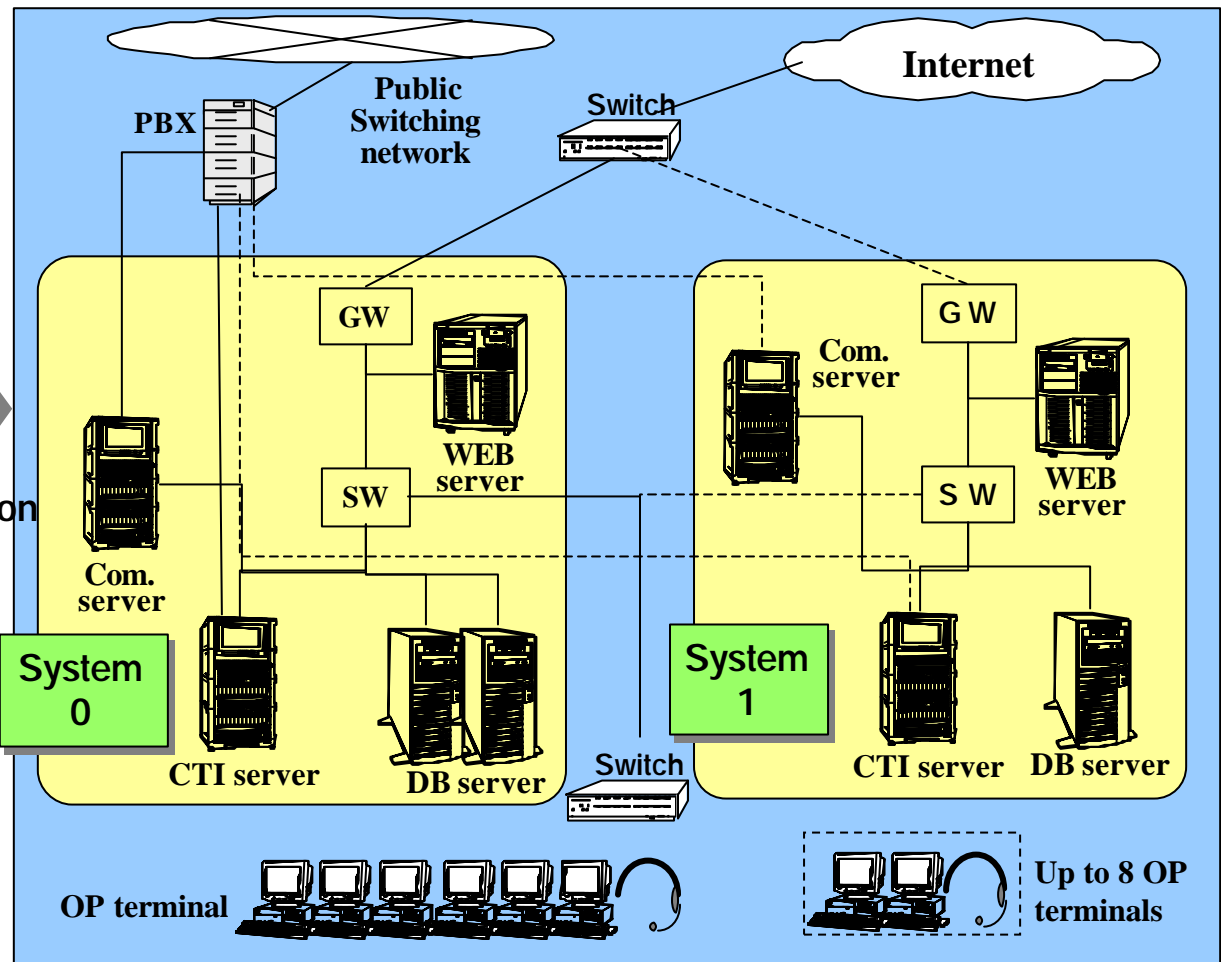
New system configuration of HELPNET

- *New system uses the packet communication with the in-vehicle unit in order to cooperate with the various car-telematics and the Internet for cell-phones.*
- *We are planning to change the business model from “B2C” to “B2B” in 2005.*
- *Cost saving through the system integration*

The old system



New system ('04 ~)



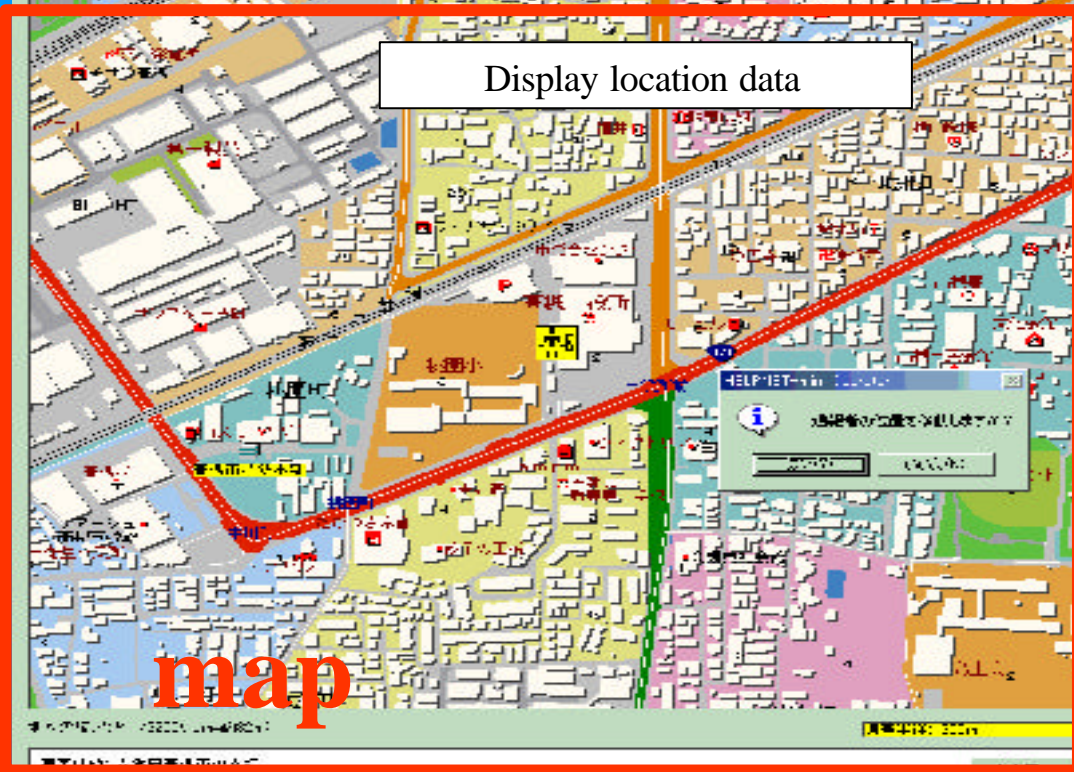
Integration



The display terminal for the operator

(It provides the most suitable user i/f for receiving the "emergency call".)

緊急通報 102217	緊急通報 102346	緊急通報 102400	緊急通報 102452	緊急通報 102522	緊急通報 102648	緊急通報 102649	緊急通報 102804
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map

Display location data

会員ID: []
 登録時間: 2003-03-02 10:10
 会員氏名: []
 会員住所: []
 会員電話番号: []
 会員メールアドレス: []
 登録種別: []

character

緊急通報
 火災
 盗難
 交通事故
 その他

緊急通報
 火災
 盗難
 交通事故
 その他

input

緊急通報
 火災
 盗難
 交通事故
 その他

Retrieval of the map

緊急通報
 火災
 盗難
 交通事故
 その他

緊急通報
 火災
 盗難
 交通事故
 その他

Selection of public agency



Effects of introducing HELPNET

Current Issues

1. Emergency calls from cellular phones have been increasing. (50%/2001)
 - It has become difficult to get names, phone numbers and locations.
2. It is difficult for a reporter to explain the situation after a trouble.

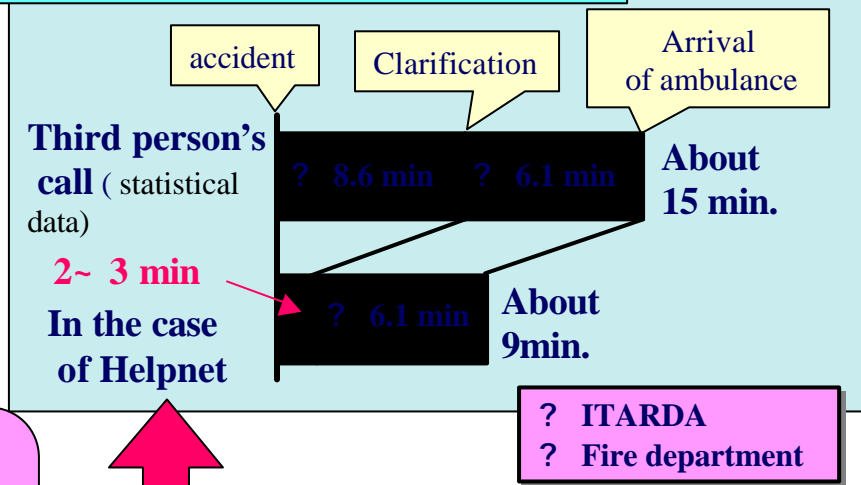
After introduction of HELPNET system

1. Pinpointing location via GPS
2. Automatic designation of a proper fire/police station depending on the location

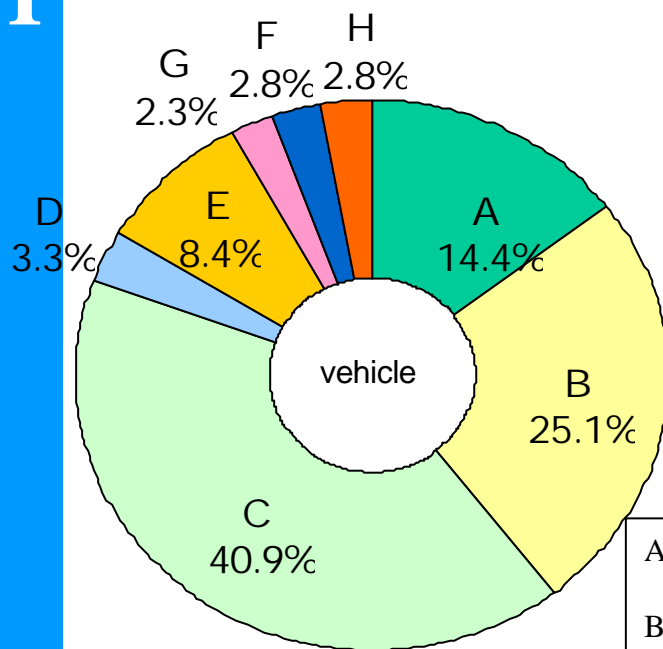
Great advantages

1. Accurate and immediate reporting of an accident situation.
2. The time until the arrival of an ambulance shortened.
3. Reducing traffic congestion after an accident. (in traffic accident)

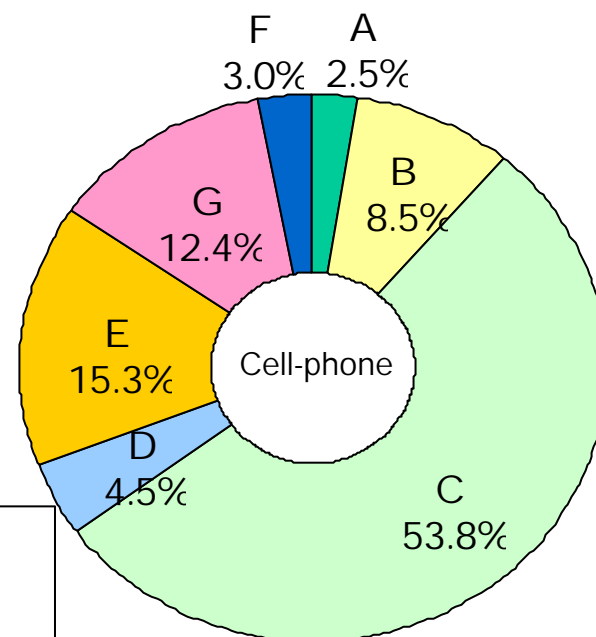
The instance of traffic accident



Emergency calls from the HELPNET members



Emergency calls from the vehicle type



Emergency calls for the cell-phone type

- A: Traffic accident resulting in injuries or deaths
- B: Traffic accident without injuries or deaths
- C: Roadside assistance
- D: Incident
- E: Hospital information
- F: Wrong or prank calls
- G: Sudden illness
- H: Others

As of end of Nov., 2004

Members of the vehicle-type -> 3,100

Members of the cell-phone type-> 57,815



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Effects of the HELP

- Shorten notification time
- Grasp the accurate position information
- Shorten arrival time
- Improve the life saving rate
- Prevent secondary disasters

Future

- Increase the number of units (vehicle type and cell-phone type)
- Coordination with other systems (ex. FAST, VICS, DSSS)



**Thank you very much
for your kind attention.**