

RESCUE

Part of  GST

Validation Results





Rescue

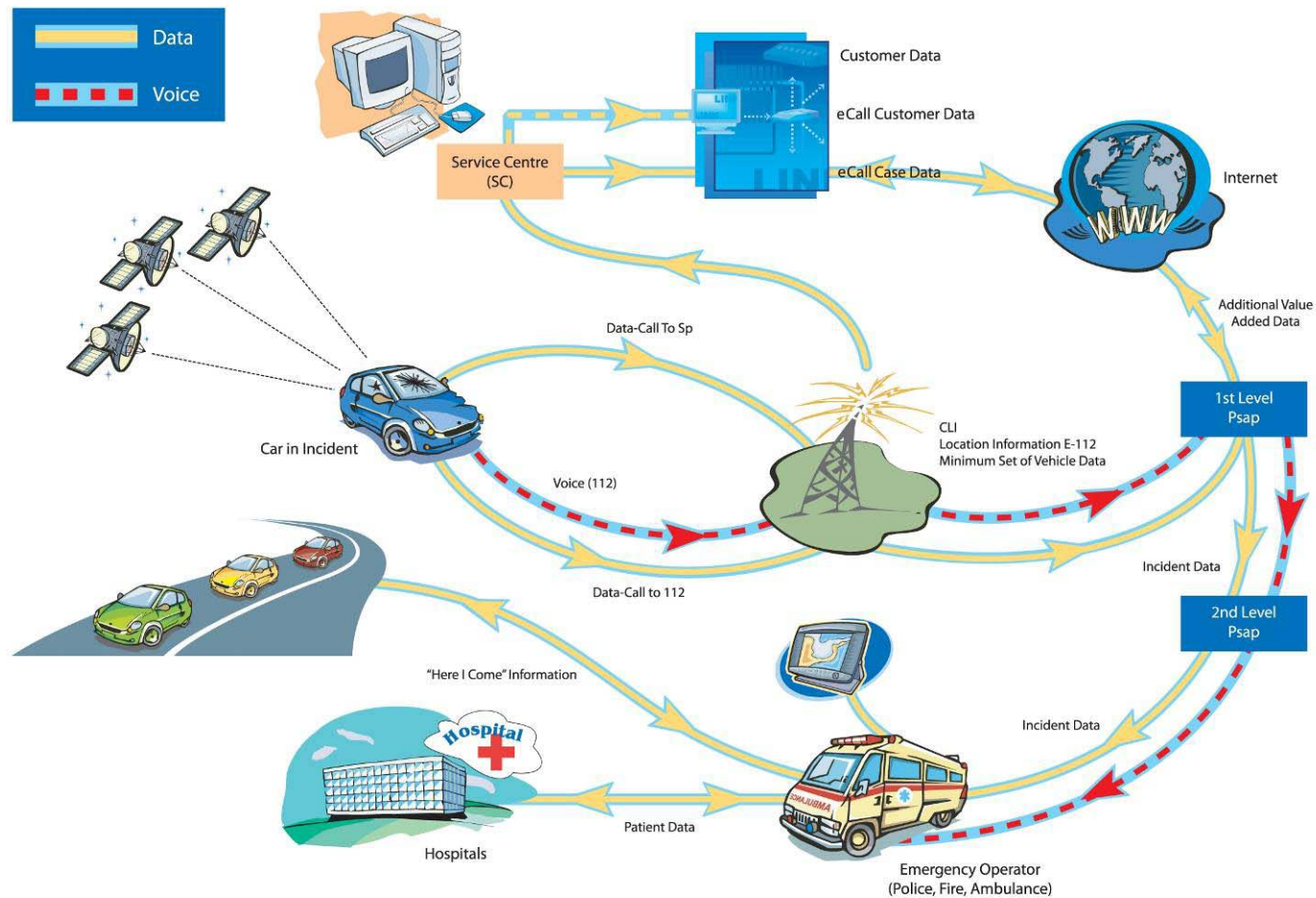
- The goal of the GST Rescue project is the construction of the totally integrated incident response chain, which will ensure the fastest and most effective response, based on GST





Rescue Overview

Rescue specified, developed and validated a “service application”, based on GST open platform, that enables the totally integrated incident response chain.



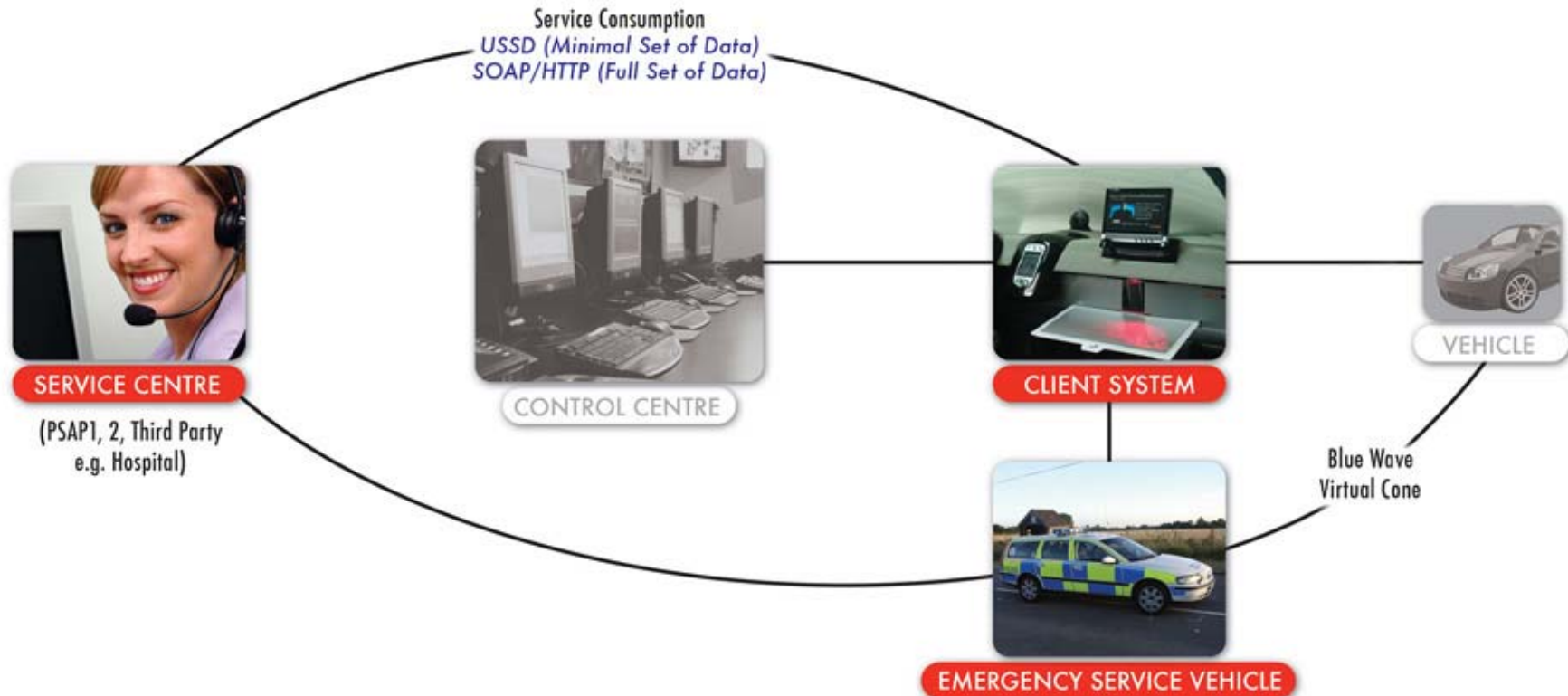


Rescue Mission

- Optimise the in-vehicle emergency call (**eCall**) via an intelligent in-vehicle trigger system
- Optimise the eCall **service chain** by ensuring that in-vehicle data reaches emergency Control Centres quickly, and where possible, is then transmitted to emergency vehicles
- Enable the emergency vehicle to reach the incident by the most appropriate route through an in-vehicle **route guidance** service
- Provide a “**blue corridor**” system through vehicle-to-vehicle communication to notify road users of the approach of an emergency vehicle
- Improve the safety of incident scenes with a “**virtual coning**” system that transmits warnings about the incident to approaching road users
- Enable remote reporting and the transfer of **relevant data** to hospitals and other third parties before the emergency vehicle leaves the scene.



Rescue Results





Rescue Results

- Basic design pattern: the ASN.1 encoding/decoding of eCall components (MSD, ACK, EOS) of the transaction
- Main protocols: USSD, SOAP, GML, TPEG
- Interfaces: eCall Activation, Emergency Data Handling (Vehicle & PSAPs), VAD Transmission, Emergency Data Visualisation (HMI at PSAP and ESV)
- Reference Implementation: PV eCall Client, Location Data Handler (Route Guidance), PV & ESV - Blue wave and Virtual cones Service



Rescue Validation Results

- Automatic eCall activation
 - ◆ TC-RSQ-0001: 96% success, confirmed by test sites
- Vehicle to vehicle communication
 - ◆ TC-RSQ-0002: 100% success, confirmed by test sites
- ESV driver support
 - ◆ TC-RSQ-0003: 100% success, confirmed by test sites
- Vehicle to centre communication
 - ◆ TC-RSQ-0004: 89% success, confirmed by test sites
- Processing time
 - ◆ TC-RSQ-0001: 96% success, confirmed by test sites



Rescue Lessons learned

- Agreement on overall architecture
- Agreement on MSD
- Agreement on message triggering mechanism
- In-band modem being standardised in ETSI, used for basic ecall: USSD used for testing purposes in GST
- Some difficulty to port legacy systems (eg. Sussex police) onto GST platform



Rescue Roadmap

- Co-ordination with *eCall Deployment plan* through the Member States and collaboration with telcos for European wide harmonisation improves the possibility for fast acceptance and standardisation
- *Short term*: eCall system specifications definition at EC level
- *Medium term*: eCall system at PSAPs and field tests including assessment of performance
- *Long term*: eCall becomes a standard and RSQ available in each car (PV and ESV)



Rescue Demonstrations

- Rescue results are demonstrated by the “official” test site. Some examples are:
 - ◆ relaying of information from the Control Centre to the services in the field
 - ◆ customised navigation support, and
 - ◆ blue waves and virtual cones activation.
- Moreover, the triggering of emergency calls is demonstrated by most test sites

