

## SOLUTIONS OVERVIEW



## Emergency Services Command and Control STORM

# STORM

## Emergency Services Command and Control

STORM allows emergency services control room operators to deploy resources quickly and effectively and supports them in providing the best possible response. It gives them the relevant information associated with an incident, and presents it to them in a way they can readily assimilate. This means the staff in the control room can make rapid deployment decisions and where necessary, they can pass information to those attending the incident.

Designed specifically for the efficient recording of information relating to incidents, STORM enables suitable resources to be quickly identified and despatched. In addition, it provides the user with a wealth of additional information relevant to dealing with an incident, whether it is related to the type of incident or its actual location. The STORM solution covers the following functional areas listed in the table below.

In the control room, the Geographic Information System (GIS) is one of the most important supporting applications. Each operator and supervisor position is provided with the ability to interface with GIS and access the following features:

- Map displays of varied scales and levels of detail
- Real-time display of resources
- Assistance in identifying the exact location of the incident
- Geographical presentation and analysis of MIS information

### Key benefits

#### Proven Command and Control application:

STORM is an established system, with a reputation for being highly stable and resilient. It is the UK police market leader and has a growing number of installations across the emergency services in mainland Europe and the Middle East.

#### Configurability and flexibility:

STORM is language independent and very adaptable to different working practices and preferences. It is highly configurable, with extensive validation table driven input and a large number of parameters. STORM is also particularly flexible in multi-agency configurations.

#### Richness of functionality:

STORM's extensive functionality has been developed to support wide ranging operational requirements. Considerable knowledge and practical experience has been used to develop a growing range of features and modules.

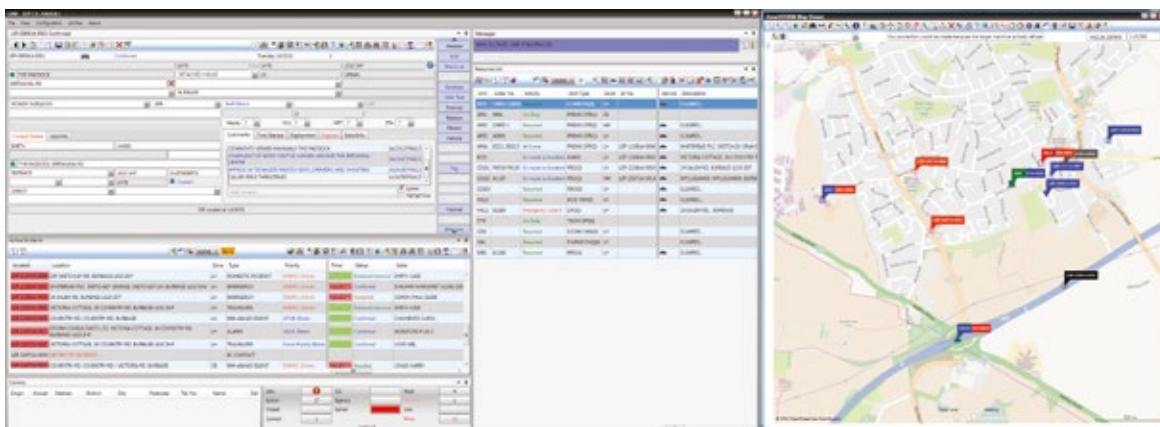
#### Licensing flexibility:

STORM is priced on an organisation-wide basis and not on a 'per seat' basis; this allows an organisation to make decisions on software deployment for purely operational purposes. This deployment selection is aided by the availability of webSTORM, the browser-based version of the application.

#### Reduced implementation risk:

STORM has been successfully implemented in over 50 customers. The Sopra Steria team has significant experience in implementing STORM in a wide range of configurations and ensures that the application is tailored to suit each organisation's unique working environment.

Incident Recording	Officer Diary
Resource Handling	STORM Enhanced Alarm Administration
Messaging	Duty Planning
Historical Information	webSTORM
Contingency Planning and Major Incident Management	Person Database
Personnel and Personnel Skills	Vehicle Database
Pre-determined Attendance	External Services Callout
STORM/GIS Interface	In-built MIS Capability
STORM Geobase Enquiry	STORM Gazetteer



## STORM overview

At the core of STORM is the Incident Recording and Resource Availability/ Deployment functionality. These critical functions have real-time displays, with concurrent access to incident and resource data in a consistent and intuitive manner.

Incident Locations are validated against the STORM Gazetteer which provides a reference point for associated data such as Similar Calls, Previous Calls, Linked Persons (e.g. Keyholders), Special Comments and Procedures, and Alarm Installation Details.

All incident updates are logged with operator/date and time stamps allowing data to be fully audited.

A closely integrated GIS function gives a real-time geographical view of Incident and Resource Locations, which can be supplemented by historical information from previous incidents.

## Resource availability and recommendation

These functions allow a dispatcher to identify the most appropriate Resource to mobilise in response to a particular Incident. STORM supports four types of Resource Recommendation displays:

- Pre-Determined Attendance (linked to Location and/or Incident Call Type)
- Skills-based
- Adjacent Vicinity-based
- Running time to incident

Real-time positional updates are provided through STORM's Automatic Resource Location interface. Furthermore, operational units can accept and update their Status and Incident logs on Mobile Data Terminals (MDT's), Blackberrys or Personal Digital Assistants (PDA's) through MobileSTORM.

Additional facilities are made available through a range of sub-systems including Major Incident Planning and Management, and External Services Callout complete with Rotas, Officer Diary and Alarms Administration. A browser-based facility, webSTORM, provides access to a range of functions to allow widespread 'no-footprint' deployment across an organisation.

STORM's interface to TETRA Radio completes the picture with respect to operational resource management and the real-time monitoring and control of those resources. Status updates and short messaging functions are supported.

## STORM's Multi-agency capability

STORM is a true multi-service, multi-agency product, with specific functions and interfaces developed for each service type, police, fire and rescue or ambulance. Its flexibility and configurability make it easy to implement and deploy across multiple agencies.

To ensure data security, restrictions are placed on the 'visibility' of detailed agency data, so that only authorised users are able to create and maintain data belonging to their specified agencies. Within this environment, STORM may be configured to allow service or agency-specific operator functions or a combined or mixed operator responsibility, e.g. multi-agency call-takers with, perhaps, agency or service specific dispatchers.

# Functions

LEP-040213-0001 Confirmed

LEP-040213-0001 Confirmed Monday 13:37:25 1

LH78 LH78 LE10 2HP

VICTORIA COTTAGE LH URBAN

36 COVENTRY RD LH

BURBAGE

ASBO RELATED ASB VULN 30min LEP

NOISY YOUTHS BREAKING WINDOW

Media ? VUL Y NPT V ETA V

Contact Details Add Info

SMETH JAMES 01455457052

VICTORIA COTTAGE 36 COVENTRY RD

BURBAGE LE10 2HP 07966825558

NOT GIVEN MALE LH78 Contact

N/WATCH VICTIM

Comments Time Stamps Deployment Disposal Extra Info

CALLER COMPLAINS OF A GROUP OF NOISY TEENAGERS 14:36:36 PAULD  
OUTSIDE OF HIS HOUSE 14:36:54 PAULD  
GROUP OF APPROX 12 - MOSTLY BOYS 14:37:05 PAULD  
THEY ARE BECOMING VERY ROWDY AND ARE DRINKING 14:37:05 PAULD

Disposition code: 'ARN' 14:06:41 PAULD

Add remarks... System Highlight Sub

LEP-040213-0001 HAS BEEN SAVED

## Call Card (Incident Registration Form)

Upon receipt of a call the operator creates a new incident, in the Call Card shown here. A system serial number is assigned, the creation date, time and operator are recorded and the incident is given a 'type' to determine grade of response and the critical response times.

For speed and ease of use, the operator is assisted in the completion of the Call Card with pull-down lists of values, typeahead input, and menu and function key driven functions.

Mandatory elements include:

- **Record of Origin** - auto completed agency code, creating operator, creation date/time and incident serial number
- **Incident Location** - selection of a valid location completes Police Beat or equivalent
- **Incident Type** - the initial call type from which may be defaulted an incident priority and closure code

Incident	Location	Zone	Type	Priority	Timer	Resource	Status	Caller	Caller Tel
LEP-120111-0005	AS AS, BURBAGE	LH	HIGH-WAY DISRUPTION	EMERG 15mins		H-G10	Released resource	LOVE NIEL	07966825557
LEP-121117-0005	APRIL COTTAGE, 19 WINDSOR ST, BURBAGE LE10 2EE	LH	ROWDY NUISANCE	VULN 30min		H-G11	Released resource	HADDON JAMES	01455457052
LEP-120513-0005	WINDMILL LODGE, WESLEY WALK, BURBAGE LE10 2ED	LH	DOMESTIC INCIDENT	NHP 60min	(0696)		Confirmed	MALONE DORIS	01455902987
LEP-120114-0005	19 SALEM RD, BURBAGE LE10 2DT	LH	BURGLARY DWELLING	NHP 60min		H-G11	Queued for resource	EUCHTER JOHN	01455870995
LEP-120114-0005	THE PADDOCK, BRITANNIA RD, BURBAGE LE10 2HF	LH	ROWDY NUISANCE	NHP 60min			Confirmed	SMETH DAVID	
LEP-120110-0005	44 RUBY ST, LEICESTER LE5 9QR	CH	THEFT OF MOTOR VEHICLE	OTHER 60min		CB41	Released resource	JONES SIMON	01162540300
LEP-070214-0005	AS AS, BURBAGE	LH	ADVICE/MESSAGE	OTHER 60min			Confirmed	LOVE NIEL	07966825557
LEP-040113-0005	VICTORIA COTTAGE, 36 COVENTRY RD, BURBAGE LE10 2HP	LH	ASBO RELATED	Negotiated Resp			Released resource	DOHERTY PAUL	07966825557
LEP-120114-0005	WINDMILL LODGE, WESLEY WALK, BURBAGE LE10 2ED	LH	ROWDY NUISANCE	Negotiated Resp		H-G10	Queued for resource	SMETH DAVID	01455457052

## Viewing and selecting incidents

Once the Incident has been raised, it immediately appears in the Open Incident List. This provides a dynamic summary display of all currently open incidents, or, by applying a filter, displays only those incidents relevant to a particular queue.

Incident location details are added from the Gazetteer, and, once a location has been accepted, the GIS is instructed to centre on the selected location at an appropriate scale.

To reduce the impact on resources of multiple callers reporting the same incident, STORM supports a Similar Calls display. If any call is received and judged to be within a defined radius for open call(s) then the operator is warned of the possible duplicate call(s).





## Resource Proposal

Resources are allocated to the incident from a Resource Recommendation, based on the resources required to meet the required criteria, e.g. PDA, skill, distance, roster, etc. As an incident progresses, STORM allows concurrent access and update, enabling the operators to record details of the on-going event. The operator can log any additional information associated with the incident on the Call Card in a free-text Remarks Log. Further deployments are also supported and recorded.

A set of configurable deployment timers allow operators to monitor incident deployment. Timer values may be designed to reflect timed target deployment events.

STORM supports both single-stage (result and close) and two-stage (result with supervisor close) closure options. The closure privilege is assigned on an operator-by-operator basis.

## Resource Handling

All changes to the active resource record, including deployment, are recorded to form a resource history. To cater for planned activity, Deployment Planning enables the creation of advanced duty sheets, which means at the appropriate time resources are automatically made available to the dispatch/mobilisation module.

STORM supports the ACPO Resource Status and Activity Codes. Resource Statuses are configurable, with up to 1,296 status codes. Timers allowing for the monitoring of resource may be associated to each ACPO Activity Code to provide activity specific health check monitoring.

Deployment may be made directly from the Resource Monitor Window with a drag and drop of a resource Callsign onto an incident Call Card or an incident in the Open Incident List. Deployment may also be made from the results of a Resource Recommendation via:

- **Running time to Incident** - if underlying route node network is available
- **Adjacent Vicinity Search** - the search for available resource spans out from the incident location according to a configurable Adjacent Vicinity ordering, e.g. beat-to-beat or section-to-section, etc.
- **Pre-Determined Attendance** - the system automatically proposes the most appropriate resource matching preconfigured parameters for a particular location, geography or incident call-type
- **Skills Search** - Specialist skills registers support the deployment of appropriately trained personnel

# Additional Modules

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## Messaging

STORM provides an integral messaging function allowing operator messages to be created and addressed to other operators, workstations or groups of workstations, printers and fax gateways.

Predefined messages can also be sent and forces can create their own in-house own forms or templates to cater for specific requirements, such as a Missing Person Form, Substance Screening Form, etc.

## Personnel

The system maintains a personnel record for each officer or staff member who may be deployed, which can be imported from an external personnel application.

## Management Information System (MIS)

STORM includes a built-in MIS facility (STORM Reporter) designed to deliver quick and easy ad hoc retrieval of data, with flexible options to display the search results.

The STORM Reporter Module allows an operator to retrieve incidents according to any number of selection parameters and to generate a graphical display of those calls distributed by priority. Other distribution selections allow incidents to be shown by shift, town/city, day of week, hour of day, closure code, tag, call type, dispatch level (e.g. section or station). It will also allow the results of a search to be represented on the accompanying GIS display as a set of icons, each representing the location of an incident.

## Integrated Communications Control System (ICCS) interface

The STORM ICCS interface provides:

- **Automatic dial from STORM** - designated telephone number fields within STORM support automatic dial enabling the user to simply double-click the required telephone number; STORM requests the connection from the ICCS via a gateway
- **Incoming Calling Line Identity (CLI) and EISEC into STORM** - selection of an incoming telephone call passes any associated CLI to the STORM client. This data is displayed in the Communications Window and the operator can update the resulting incident with the CLI
- **TETRA Radio Interface** - STORM's TETRA interface supports short messaging to/from radio and Automatic Resource Status Update

## Automatic Resource Location System (ARLS)

STORM's ARLS functionality includes:

- Automatic Resource Location update within the STORM Resource Monitor display and on the GIS display
- Logging of ARL Update
- Search and retrieve ARL data with GIS playback feature
- Track callsign on GIS
- Replay facility, which allows fast replay of position updates for records retrieved by Callsign, GPS identity and/or date/time range

## Alarms

When an alarm is received it is then entered as a new incident and details are retrieved from the STORM Geobase (gazetteer), which stores alarm premises details and the associated key holder details. STORM incorporates an automatic False Call Monitoring process that is entirely configurable and supports the ACPO recommendations.

## External Services Callout

STORM supports a generalised rota system to enable any set of service providers such as garages to be placed on call-out rotas.

## Contingency Plans

Contingency and Action Plans may be associated with an incident call type and when the call type is selected, the operator is automatically alerted to the special procedure or plan to be followed.

All plans can be split into tasks, and as many similar tasks are included within different plans, the tasks are held in one place and simply grouped together to create a plan. Multi-task plans can be created allowing the force to plan for major incidents where extraordinary co-ordination of resource is required.

## Geobase enquiry

A separate module allows gazetteer searches outside incident handling. It is a STORM module but invoked from the map and allows a search to be made and the location indicated on the map with a marker. This module may also be linked to the QAS Names product to allow for electoral roll data searching and related names display.

# Additional features

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## Integration

STORM's integration capabilities are extensive, supporting interfaces to a range of national databases, local operational systems and Customer Relationship Management Systems.

- GIS - current integrations include ESRI, Northgate, MapInfo and Cadcorp
- Call handling - Aspire, IIZUKA Citizen Services Manager and Stratus Vantage
- Crime/Incident/Event Recording and Management Systems
- HR and Duty Management Systems
- Automatic Number Plate Recognition (ANPR) Systems

STORM's Incident Transfer facility provides the ability to export or import incident details to and from another Command and Control system. Additional interfaces can be supported as required.

## webSTORM

webSTORM provides both view access to data and entry of new incidents. Functions include: Active Incident Lists with list filters, Active Resource Lists with list filters, Incident details, Attached Resource Display, Location comments, Incident type comments, Previous Call History, New Incident creation.

## MobileSTORM

The MobileSTORM application has been specifically designed to run on PDA's and MDT's, providing a relevant subset of functions appropriate to the remote user.

“If you are going to talk the language of police forces around the UK it helps enormously if you have hands-on, practical knowledge of frontline policing. The Sopra Steria team has many years' experience within the police sector which means that they understand the processes and responses necessary in our line of business and together we can achieve systems and solutions that are truly fit for purpose. Their familiarity with our systems along with their ability to work in close partnership is a real differentiator in a sector like this where trust is paramount.”

Dave Brooks  
Command and Control at Kent Police

## Sopra Steria

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