



Harmonised eCall European Pilot



#heero

# Spanish Pilot site

## Filtering instance integration with traffic management

Ana Blanco (Dirección General de Tráfico)

HeERO International Conference

27 November 2014

Madrid, Spain



# Agenda

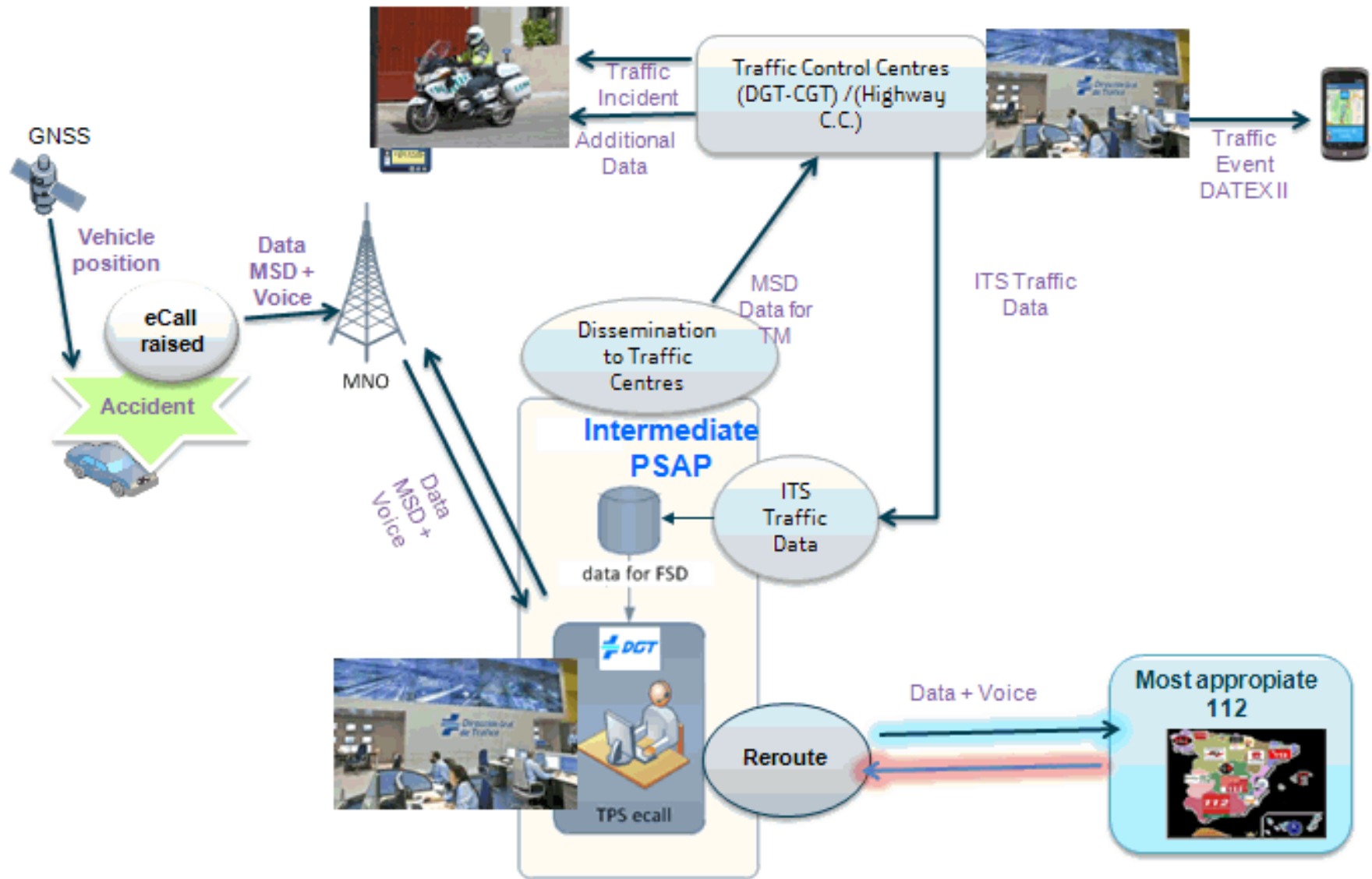
- Spanish consortium
- Spanish eCall Architecture
- Main challenges
- Interface with Traffic Management Centre

# A lot of Spanish partners and stakeholders

- A lot of partners
  - Public Administration: DGT, Civil Protection, Regional 112, Gral. Sub. on Telecom. Networks and Operators
  - Commercial partners: GMV, CTAG, CEIT, RACC, Telefonica, Ericsson, ITS España, NZI, Ficosa, SICE, CARTIF
- All eCall stakeholders involved
  - Public Administrations, PSAPs, IVS providers, MNO, Automobile Associations, system



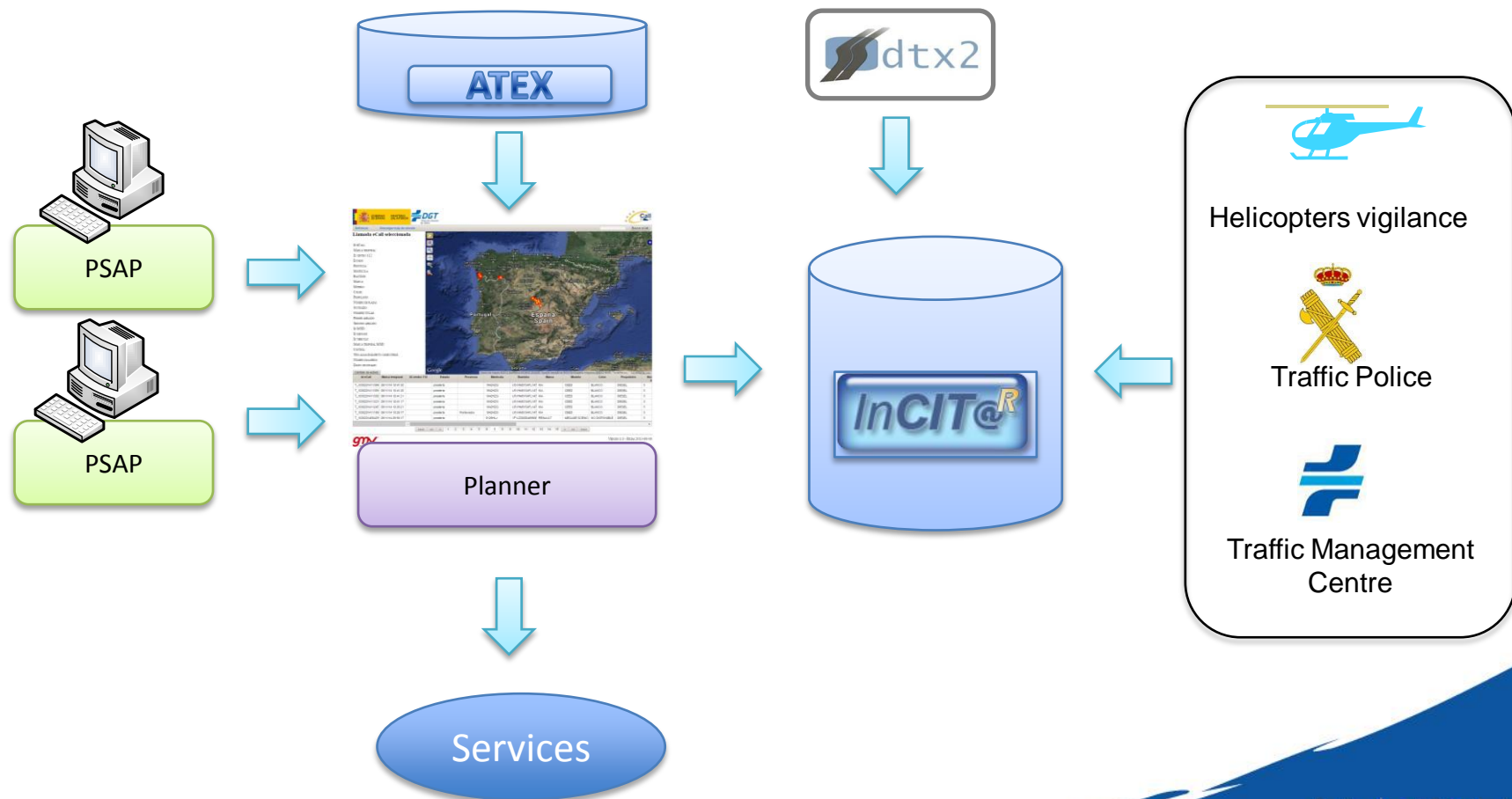
# Intermediate PSAP model



# Possible eCall model from 1 October 2017

- Results from HeERO2 pilot project will be used for final decision on Spanish architecture
  - Intermediate filtering national PSAP vs. decentralized regional 112 PSAPs
- DGT as HeERO2 pilot coordinator has insisted the commercial partners to have final solutions (no prototypes)

# eCall interfaces





# Main challenges

- Intermediate PSAP able to decode MSD and filtering received eCall, and having direct interfaces with:
  - Spanish vehicle database
  - Traffic incidents database
  - Traffic police (Guardia Civil)
- 19 decentralized regional 112 PSAPs with competences on emergency services (4 of them in HeERO2 pilot project)
- Different procedures for manual and automatic eCalls

# Interface with Traffic Management Centre

- Intermediate PSAP is placed at DGT's central Spanish Traffic Management Centre (including Traffic Control Centre TCC and Traffic Information Centre TIC) allowing interconnection with different system/services via an **eCall planner**
  - The Spanish vehicle database: ATEX
  - The Spanish traffic incident database: LINCE/INCITAR
  - The own DGT's traffic police: Guardia Civil
  - Own TCC/TIC road traffic monitoring equipment & systems



# eCall planner

- Interface between eCall system and rest of traffic and emergency systems
- eCall Planner receives the MSD data from the intermediate PSAP via web services:
  - It enriches the information with data from ATEX (DGT vehicle database)
  - It stores all the information
  - It passes some data to LINCE (DGT alerts system)
    - And then to the INCITAR system (traffic incident database)

# eCall planner

- eCall Planner provides two standard interfaces:
  - Web services: send eCall data (MSD), consult eCall information and change eCall status (prealarm, alarm, false alarm)
  - Web: contains a map with a layer of eCall events, and the detail of every eCall MSD set of data



# Spanish vehicle database (ATEX)


- Data obtained from this database and integrated with eCall records
  - VIN
  - Vehicle brand and model
  - Vehicle color
  - Number of users
  - Vehicle stolen?
  - Vehicle owner

The screenshot displays the Spanish eCall database interface. At the top, there are logos for the GOBIERNO DE ESPAÑA, MINISTERIO DEL INTERIOR, and DGT (Dirección General de Tráfico). Below the logos, there is a search bar and a button labeled 'Buscar eCall'. The main content area is divided into two sections. On the left, there is a list of vehicle data for a selected eCall, including fields like ID eCall, Marca temporal, ID centro 112, Estado, Provincia, Matricula, Bastidor, Marca, Modelo, Color, and Propulsión. On the right, there is a map of Spain with a red dot indicating the location of the selected eCall. Below the map, there is a table with the following columns: Id eCall, Marca temporal, Id centro 112, Estado, Provincia, Matricula, Bastidor, Marca, Modelo, Color, Propulsión, and Número de usuarios. The table contains several rows of data, including vehicles from KIA, CEED, and RENAULT.

Id eCall	Marca temporal	Id centro 112	Estado	Provincia	Matricula	Bastidor	Marca	Modelo	Color	Propulsión	Número de usuarios
T_1030201411384	06/11/14 10:41:30		prealerta		1942H2G	USVHM515APL147	KIA	CEED	BLANCO	DIESEL	5
T_1030201411355	06/11/14 10:41:28		prealerta		1942H2G	USVHM515APL147	KIA	CEED	BLANCO	DIESEL	5
T_1030201411330	06/11/14 10:41:21		prealerta		1942H2G	USVHM515APL147	KIA	CEED	BLANCO	DIESEL	5
T_1030201411321	06/11/14 10:41:17		prealerta		1942H2G	USVHM515APL147	KIA	CEED	BLANCO	DIESEL	5
T_1030201411245	06/11/14 10:28:21		prealerta		1942H2G	USVHM515APL147	KIA	CEED	BLANCO	DIESEL	5
T_1030201411185	06/11/14 10:28:17		prealerta	Pontevedra	1942H2G	USVHM515APL147	KIA	CEED	BLANCO	DIESEL	5
T_1030201409425	06/11/14 08:56:17		prealerta		6128HLJ	VVF1J200D4880E	RENAULT	MEGANIE SCENIC	NO DISPONIBLE	DIESEL	5


# Spanish traffic incident database (LINCE/INCITAR)




GOBIERNO DE ESPAÑA  
MINISTERIO DEL INTERIOR

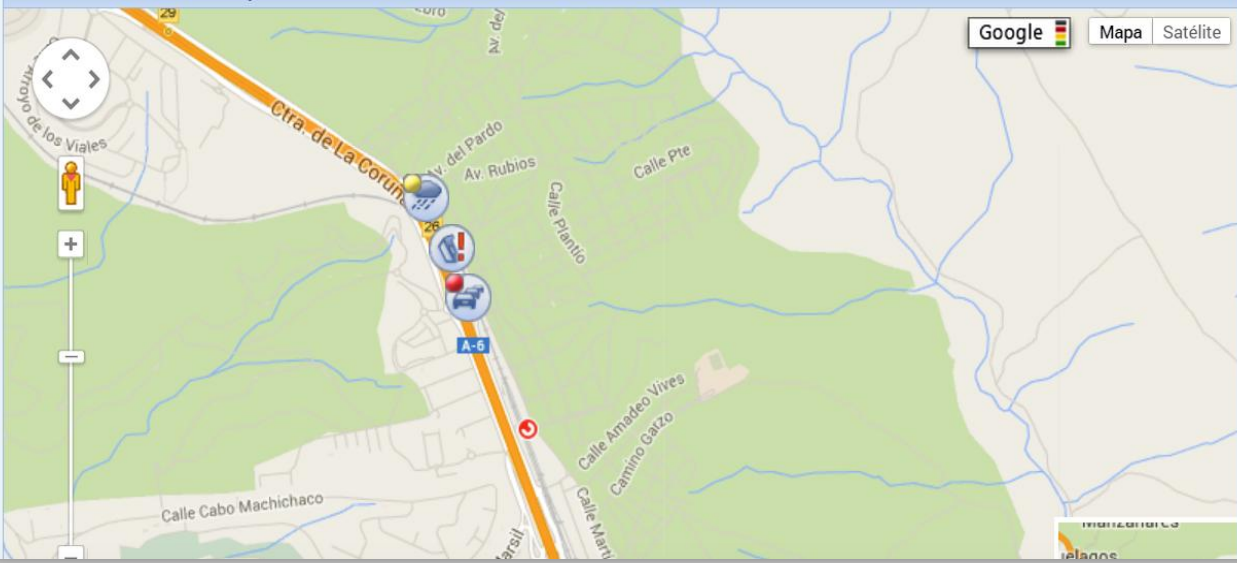
ACTUALIZACIÓN: 13/11/2014 10:59:55  
FECHA LOCAL: 13/11/2014 11:03:57



DGT  
Dirección General de Tráfico




Incitar2 Nº incidencias: 571/808



Google

Mapa

Satélite



LINCE

Sucesos activos

Nuevo suceso

Escenarios

Nuevo Escenario

Conf. Alertas

Sucesos Históricos

Configuración Notificaciones

Notificaciones pendientes (0)

SUCESOS > Consulta > Listado

LINCE [Juana María Fernández Sánchez (94

	Suceso	Carácter	Fecha Inicio	Provincia	Población	Localización	Referencia	Ref.Externa
	LLUVIA	ACONTECIMIENTO	13-11-2014 10:54:00	MADRID	CHOPERA (LA)	A-6 (26.6, 20)*	MET_M_A-6(26,3)_141113	
	RETENCIÓN DEL TRÁFICO	ACONTECIMIENTO	13-11-2014 10:50:00	MADRID	CHOPERA (LA)	A-6 (26.1, 23)+	REN_M_A-6(23)_141006	
	E-CALL	ACONTECIMIENTO	06-10-2014 11:26:25	MADRID	BERZOSILLA (LA)	A-6 (32)S	EME_M_A-6(32)_141006	eCall-HEERO-T_09292014111

# Spanish traffic police

- When an automatic eCall is received, the operator tries to identify if it is a real accident or just a false alarm
  - Establishing a callback to the source of the eCall
  - Obtaining information from the Traffic Management Centre
    - CCTVs, Traffic Data Capture stations
  - Sending traffic police for a first inspection & eCall validation





# Traffic Management Centre (TCC & TIC)

- **eCall Demo. Visit on Friday 28<sup>th</sup>**
  - eCall interface with Traffic Management
    - equipment and systems used for road traffic monitoring

## SENSORES DE TRÁFICO SE-30 Pk 8.05 C

Intensidad : 1200 Veh/h  
Velocidad media : 37 km/h  
Ocupación : 8 %  
Ligeros : 94 %

## PANELES DE TRÁFICO M-45 Pk 0.29 C



## CÁMARAS M-40 Pk 34.8 D







# Thank you for your attention!

## Questions?

Ana I Blanco Bergareche  
Dirección General de Tráfico  
abergareche@dgt.es

### Así funciona eCall

Nada más producirse el accidente, el vehículo con sistema eCall llama al 112 y se activa la movilización de los servicios de emergencia.

