eCall Implementation in Lithuania

Workshop on "Numbering for eCall"
31-01-2017, Copenhagen

Introduction

» Emergency Response Centre (ERC)
  - National 112 Emergency Call Handling and Fire Dispatch
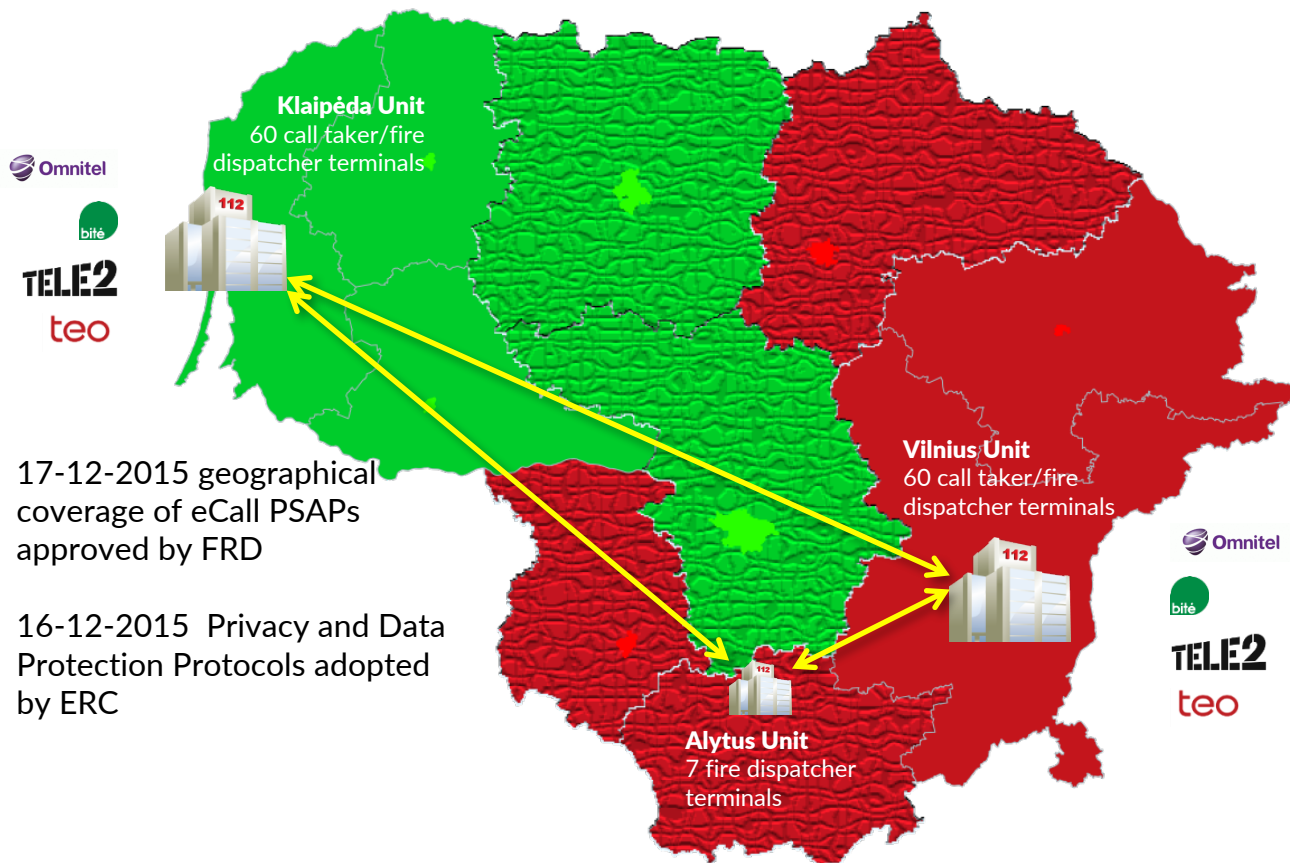 - Head Organization – Fire and Rescue Department at MoI

» Tadas Maroščikas
  - ERC's Deputy Director IT & Operations
  - EENA Operations Committee Vice-Chair for 2016
  - Co-Author of EENA case study document "eCall implementation in Lithuania"

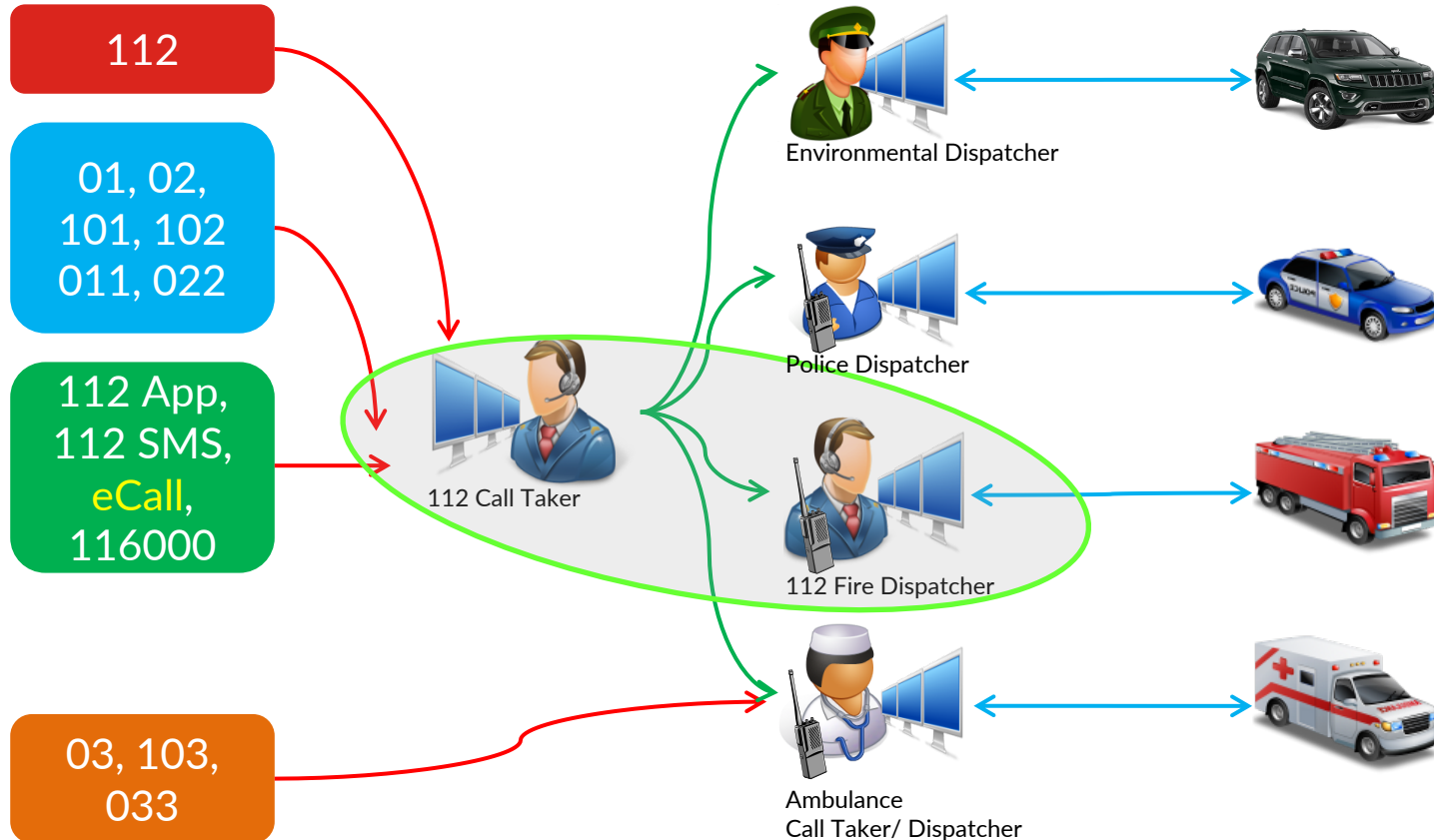» eCall compatibility (EN 16072, EN 16062)
  - since Nov. 2015

» AML/AEL Android handset location compatibility
  - since Nov. 2016

» Timing Advance/Round Trip Time mobile caller location
  - Since Jan. 2017

112 & eCall PSAPs

Klaipėda Unit
60 call taker/fire
dispatcher terminals

Vilnius Unit
60 call taker/fire
dispatcher terminals

Alytus Unit
7 fire dispatcher
terminals

17-12-2015 geographical
coverage of eCall PSAPs
approved by FRD

16-12-2015 Privacy and Data
Protection Protocols adopted
by ERC

Emergency Call Handling Model

112

01, 02,
101, 102
011, 022

112 App,
112 SMS,
eCall,
116000

03, 103,
033

Environmental Dispatcher

Police Dispatcher

112 Call Taker

112 Fire Dispatcher

Ambulance
Call Taker/ Dispatcher

ERC Numbers in 2016 v. 2015

» Total of 112 voice call contacts – **3.295.508** (**↓7,6%**);
» Answered calls – **2.484.958** (**↓5,9%**);
» Abandoned calls (over 5 sec.) – **114.223** (**↓33%**)
» Total of call transfers/dispatches – **996.914** (**↑4%**);
  ▪ Police – **527.956** (53%, **↑3,9%**);
  ▪ Ambulance – **412.685** (41%, **↑13%**);
  ▪ Fire & Rescue – **33.964** (3,4%, **↓8,4%**);
  ▪ Environmental – **11.135** (1%, **↑8,4%**);
  ▪ Other – **11.162** (1%, **↑87%**).
» Total of 112 SMSs received – **38.290** (**↓32,5%**):
  ▪ Real responses – **240** (**↑79%**);
» Total of contacts via 112 App (GPIS 112) – **2.999** (**↑30,3%**); :
  ▪ Voice contacts – **299** (**↑63,4%**);
  ▪ Text contacts – **2.700** (**↑27,4%**);
  ▪ Real responses – **56** (**↑180%**).

eCall Upgrade – Scope PSAP Side

112 Mobile Voice Call

Location information (Cell-ID) via VPN

112 PBX (HiPATH)

Voice — MNO — Voice — Voice — Voice / Cell-ID

112 CAD DB (ELS/Oracle)

112 eCall

National Car Register KETRIS & Eucaris DB

112 VIN extraction XML Inquiry Server

Location information (Cell-ID) via VPN

112 PBX (HiPATH)

112

Voice MSD — MNO — Voice MSD — Voice

HiPATH to eCall MSD decoder interface

MSD

Decoded MSD

Voice Cell-ID Decoded MSD Extracted VIN

112 CAD DB (ELS/Oracle)

112 eCall upgrade new hardware and software modifications
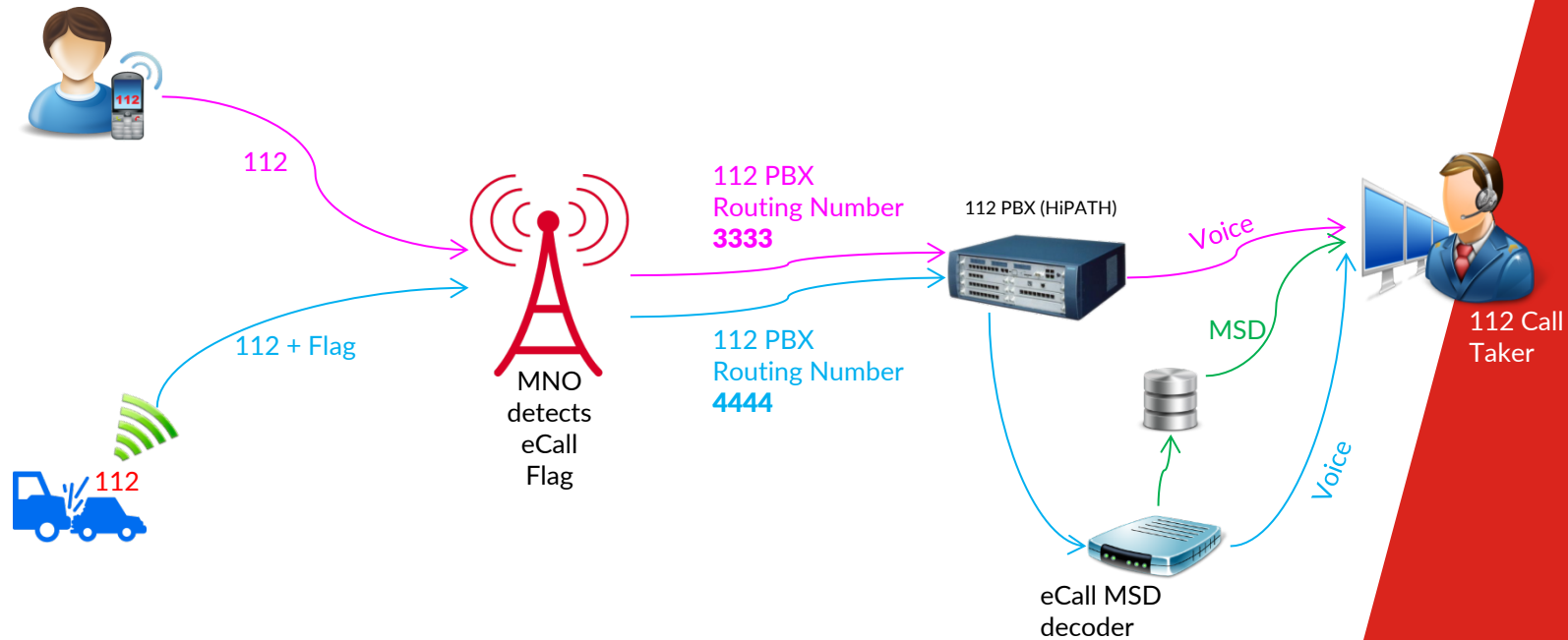
eCall MSD decoder

eCall MSD decoder to 112 CAD interface

eCall Modem/Decoder

» Decodes up to 8 simultaneous eCall MSDs.
» Integrates into existing/used ERC information system hardware and software;
» 4 decoders – 2 in each PSAP;
» Open and documented interface for integration with emergency call handling systems.
» Shall meet specifications of SOAP protocol and support XML data exchange via Web Services;
» Decoders shall provide decoded data in structured format as well as MSISDN number into ERC's information system.

eCall Flag (Discriminator)

» 30-06-2015 National eCall MoU signed „On eCall functionality in the MNOs";

» 10-11-2015 eCall Flag demo tests scenarios agreed;

» 07-03-2016 eCall Flag demo tests accomplished;

» 01-10-2017 All actors are eCall ready.

eCall Routing from MNOs

112

112 + Flag

112

MNO detects eCall Flag

112 PBX Routing Number **3333**

112 PBX Routing Number **4444**

112 PBX (HiPATH)

Voice

MSD

Voice

Voice

eCall MSD decoder

112 Call Taker

Pranešimai

...	Data/l...	Siuntėjo vardas	Apibūdir
1	16:00_...	A_Lisovskiene	Sukurtas
1	16:00_...	D_Valaitiene	Pataisyta
1	16:00_...	J_Mikalonyte	Pataisyta
1	15:59_...	wdogdaemon	The alarn
1	15:58_...	I_Rubulyte	Sukurtas

Informacija Įvykio Nr. eCall

Įvykių apžvalga

Įvykiai

radėtas kurti	Įvykio num...	Įvykio
		eCall
6:00_2015.07.31	151372448	Chem
5:58_2015.07.31	151372447	Triukš
5:57_2015.07.31	151372446	GMP
5:55_2015.07.31	151372445	Stipru
5:54_2015.07.31	151372444	Techn
5:53_2015.07.31	151372443	Vagys
5:51_2015.07.31	151372442	GMP

Sub-Įvykis Įvykio

Įvykis | Įvykio valdymas | Zona | Kontaktai | Route

eCall	2015.07.31	16:00:01

eCall ID: 141

TP tipas: Passenger Clas

Valst. Nr.: GHV521

Persk. Nr.:

eCall Tipas: Rankinis

Degalų tipas: gasoeline

Spalva: PILKA

37061814047

BDR ID: 1

Gamintojas: BMW

Atnaujinti BDR | Perskambinti

Testinis: Ne

Keleivių skaičius: 2

Modelis: 520D

Vieta: Patikima

Metai:

Rodyti žemėlapyje

data: 2014-11-21 11:49:51; Savininkai: [Tipas: , Nuosavybės tipas: , Vardas: - , Pavardė: - , Asmens kodas: - , Dokumento numeris: , Dokumento data: - , Juridinio asmens pavadinimas: "Swedbank lizingas", UAB, Juridinio asmens kodas: 111568069, Adresas:].

Bendroji įvykio informacija | eCall

Įvykio Nr.: | Įvykio tipas: eCall | Prioritetas:

Išorinis Nr.: | Priėmė | Rokas | Redagavo | Rokas
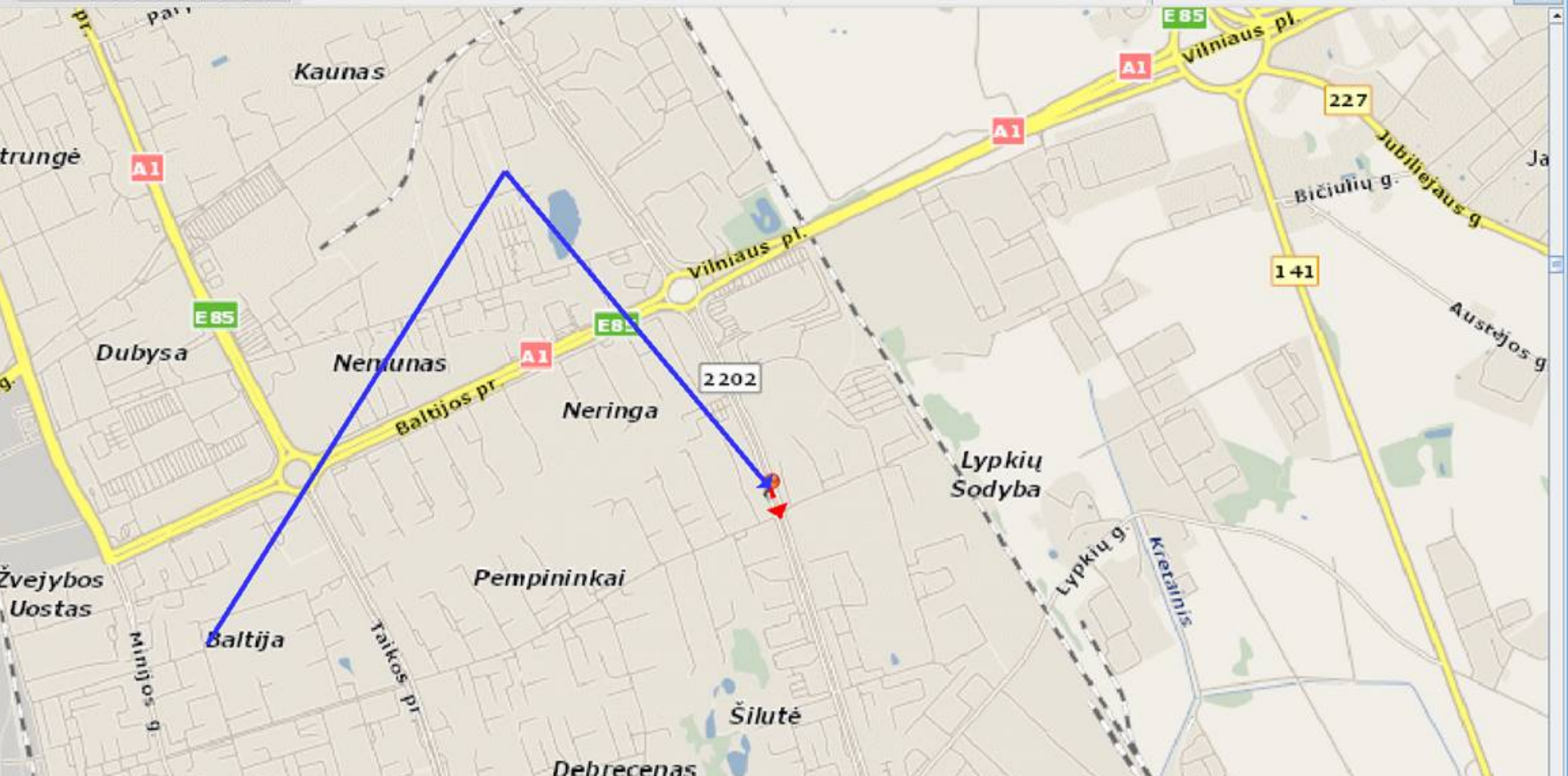
Skambinančiojo duomenys | 37061814047

Rinktas numeris: | Operatorius: Omnitel

Pavadinimas: | Vardas: | Pavardė:

Telefono Nr.: 37061814047 | Tipas:

2771 m

Skambinančiojo adresas

Valstybė: | Savivaldybė: | Pašto kodas: | Mst./Sen.:

Gatvė 1: | Namo Nr.: | Buto Nr.:

PSAPs Conformity Assessment

» Conflict – Fire & Rescue Department is the owner of the ERC's information system, ERC is the user;

» Next up is MoI;

» Designate **competent** authorities that will assess conformity of the operations of the eCall PSAPs with the requirements of (EN 16454);

» eCall PSAPs are able to demonstrate to the competent authorities that they meet all specified conformance requirements.

TPSPs

» PSAP long number is provided under agreement to 1 private call center;

» No data interface so far;

» TPSPs should use the same mechanism as 112 eCall;

» No financial and administrative burden for PSAPs.

Thank You All!

Looking for a test car to crash...

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/112LT   /112LT   /BPC112