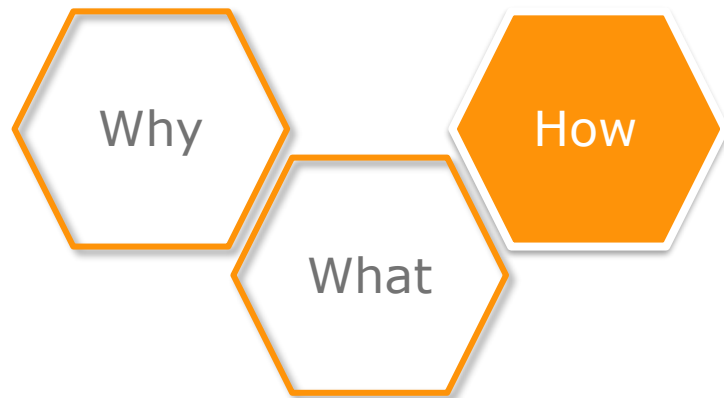# NG112

E2E Implementation Guidelines

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NG112 - Implementation

Document Purpose & Goals

- Complementary to TS 103 479
- Focus on the "How"
- Non-Technical Guidelines
  - Process & Milestones
  - Stakeholders
- Inside-Out Approach
  - Early benefits

Why

What

How

Getting Started

Responsibility Group

- Responsible for the NG112 Implementation
- Different Stakeholders
- Budget Considerations
  - Procurement & Operations
  - Fundings
  - Project Management

Milestones

- 7 Milestones
- European Wide Next Generation 112
- Interoperability
- Keep Countries' Autonomy

| STRATEGY | INFRASTRUCTURE | CORE SERVICES | PSAP | MOBILE OPERATORS | MOBILE OPERATING SYSTEM | EUROPEAN INTERCONNECTION |

Milestone 1

- Emergency Services
- Emergency Service Model
- Geographical Jurisdiction
- Fallback / Support Scenarios

Strategy Plan

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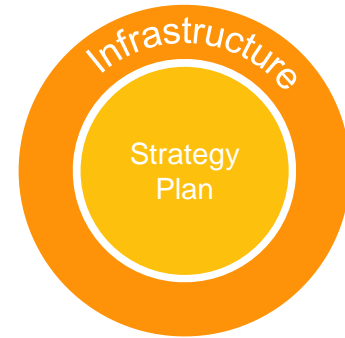EUROPEAN EMERGENCY NUMBER ASSOCIATION
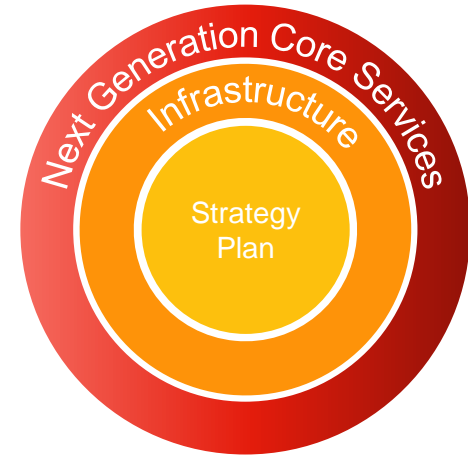
Milestone 2

Provision Infrastructure

- IP-based Infrastructure for Emergency Services

- ESInet (Emergency Services IP Network)

- National Authentication & Authorization
  - Who gets access
  - How to get access
  - Technical requirements

Infrastructure

Strategy Plan

Milestone 3

- Provide NG functionality
  - Emergency Service Routing Proxy
  - Emergency Call Routing Function
  - Location Information Service
  - Border Control Function
- Standardized Interfaces (TS 103 479)
- Best of Breed (Multi-Vendor)

Next Generation Core Services

Infrastructure

Strategy Plan

Milestone 4

PSAP Enablement

- Technical Requirements
  - IP-based Emergency Calls
  - Additional Call Data
- Operational Process
  - Chat, Video
- ESInet Connectivity
- ESInet Configuration
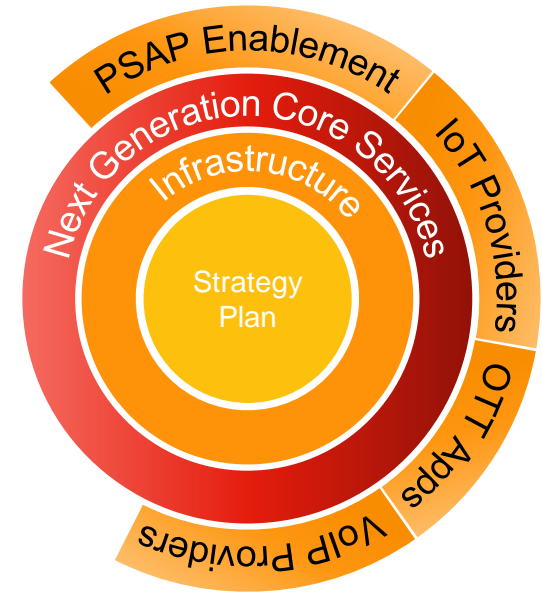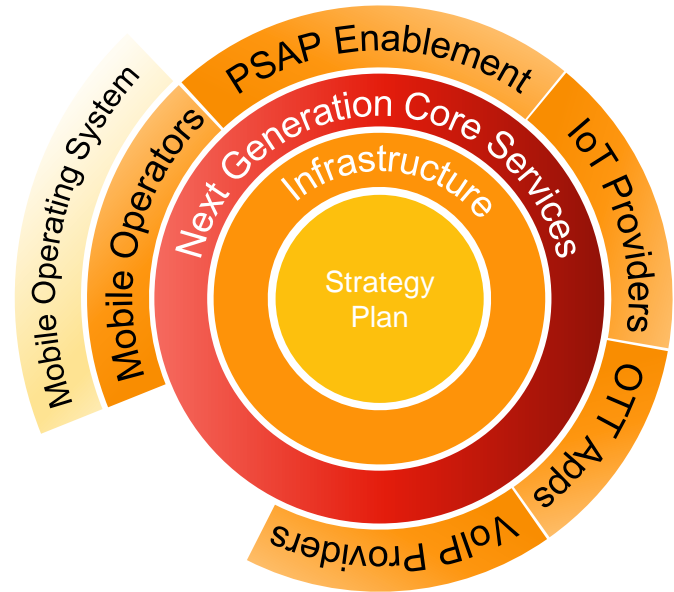
Milestone 5

Mobile Operators

- ESInet Connectivity
- Forward Calls (VoIP) to ESInet
- Enrich calls with additional data
  - Cell Tower Location
 - Subscriber Information
- Prepare VoLTE / ViLTE
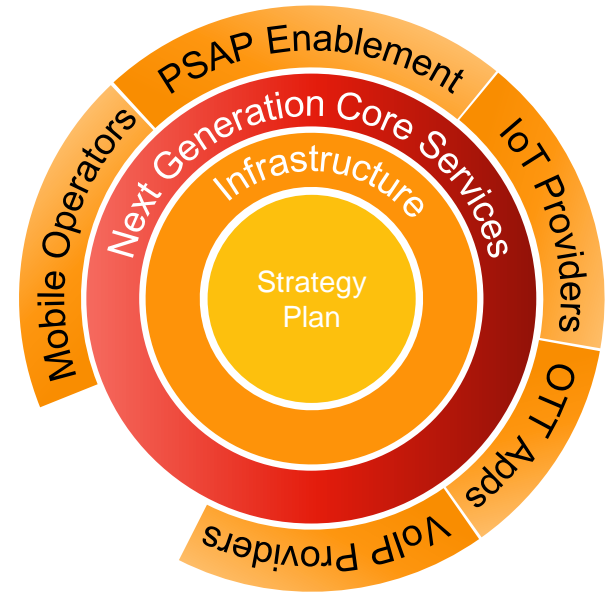
Milestone 6

- Use VoLTE / ViLTE for Emergency Calling
- Integrate Location
- API for Emergency Apps

Milestone 7

- European Interconnection
- European Authorization
  & Authentication Mechanism
- Allow Interoperability
  - Forward Emergency Calls
- Keep Local Autonomy
  - Forest Guide

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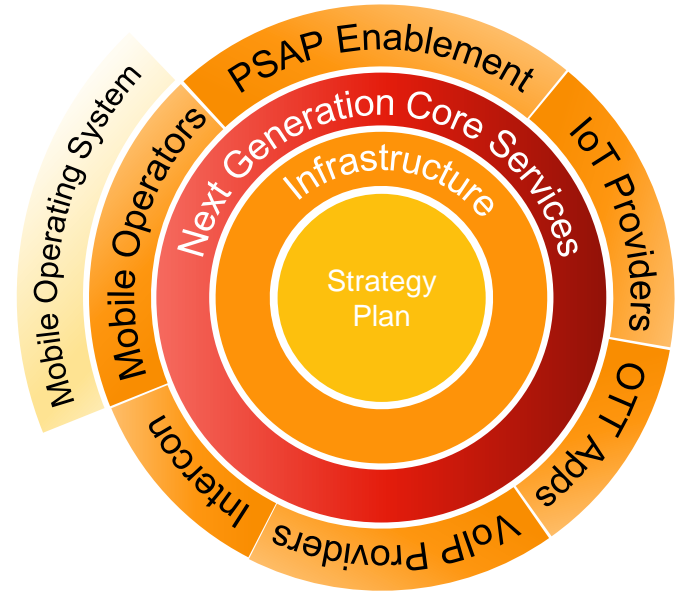
Summary

- NG112 Implementation can start now
- Additional Benefits on the way
- Independent of VoLTE / ViLTE
- Foundation for Future Innovation

STRATEGY → INFRASTRUCTURE → CORE SERVICES → PSAP → MOBILE OPERATORS → MOBILE OPERATING SYSTEM → EUROPEAN INTERCONNECTION
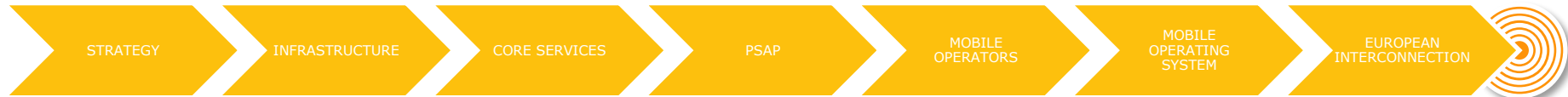
NG112

Projects and Events

EENA NG112 Project

- ## CELESTE (Austria, Italy & Denmark)

International ESInet for mapping and routing emergency calls, live texting and PSAP integration

Copenhagen Greater Fire Department, Leitstelle Tirol Gesellschaft mbH, CUE (Centrale Unica di Emergenza) Trento, 112 Bolzano, Beta 80, Austrian MoI, Frequentis & GridGears (RTR Austria as Observer)

- ## CROATIA

Emergency video, real-time text and voice call on NG112 architecture

Croatian Civil Protection Directorate & King ICT

- ## TURKEY

Call routing, emergency video call and real time text

Ambulance and Emergency Physicians Association, Turkish Ministry of Health, Armakom Information Technologies Inc., Havelsan & Turkcell
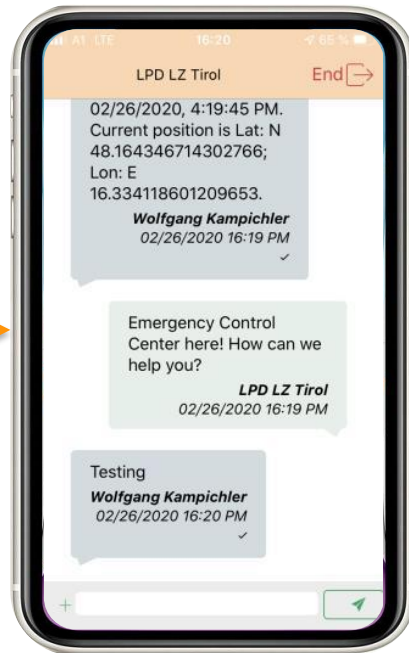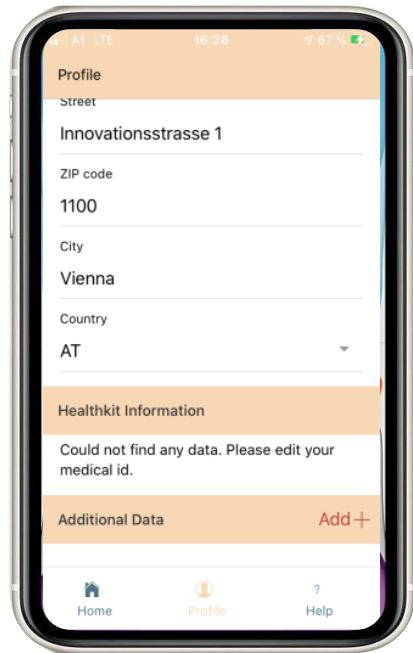
CELESTE

- Local or regional ESInet deployments and a Forest Guide

- Interconnected ESInets to allow roaming with DEC112 and other similar services

- Providing multimedia capabilities (audio, video and text)

- Participating PSAPs integrate with the ESInet to receive call or chats in case a person in need is using the DEC112 application or other VoIP clients
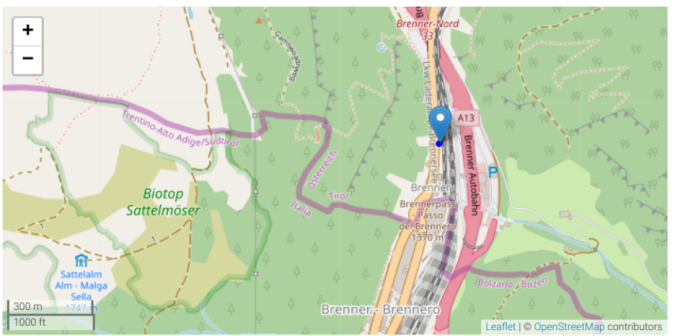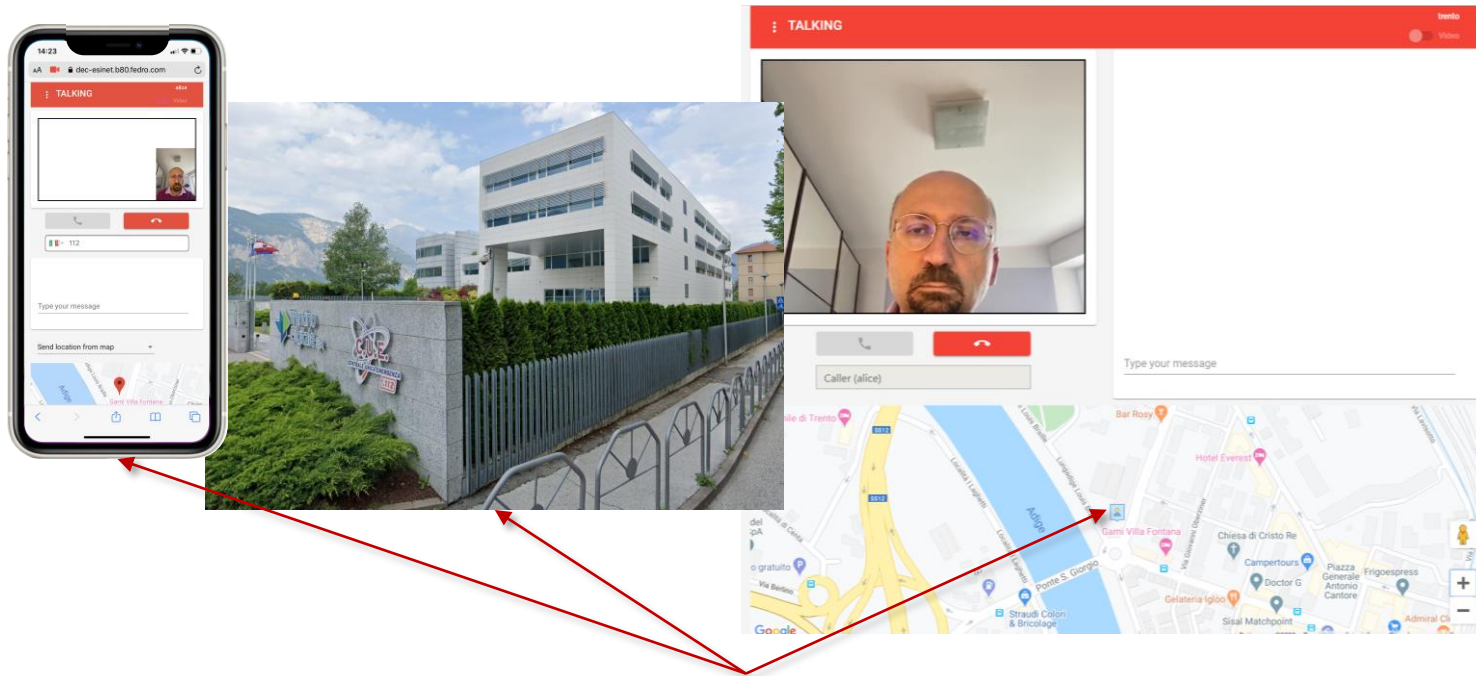

CELESTE Burger

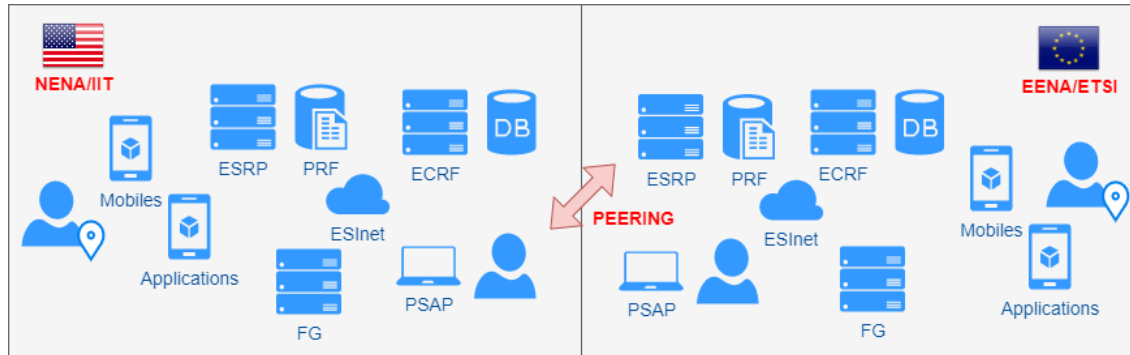# DEC112 Client

DEC112 PSAP

PSAP WebView

Application

Multimedia Client

Caller location

ETSI Plugtests #4

- First joint test event (NENA/ICE9 & EENA) early 2021 (Registration open!)
- Standards based interoperability and conformance testing
  - ETSI TS 103 479, TS 103 480 & NENA STA-010.3 i3
- Transatlantic ESInet peering, MNO and VSP integration, AML, NG eCall
- Location, Routing/Mapping, Audio/Video/Real-time Text, Security

NG112

Questions & Answers