NG112
E2E Implementation Guidelines
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
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
Milestone 1

Emergency Services Strategy Plan

- Emergency Services
- Emergency Service Model
- Geographical Jurisdiction
- Fallback / Support Scenarios
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
Milestone 3

Core Services

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

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

Mobile Operating System

- Use VoLTE / ViLTE for Emergency Calling
- Integrate Location
- API for Emergency Apps
Milestone 7

European Interconnection

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

• NG112 Implementation can start now
• Additional Benefits on the way
• Independent of VoLTE / ViLTE
• Foundation for Future Innovation
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
• 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
DEC112 Client
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 ESI.net peering, MNO and VSP integration, AML, NG eCall
- Location, Routing/Mapping, Audio/Video/Real-time Text, Security
NG112
Questions & Answers