



DSMIP6-TLS in emergency response  
and public safety teams

or

*IPv6 enabled self organizing systems for  
emergency response environments*

# Agenda



- Politics, marketing and all about EC IPv6 pilots and experiments call – 1 minute
- What we really want to do – 19 minutes

## EC CIP call



- 3M EUR of funding for IPv6 pilots and experiments in member states, 50% funded
- 5 experiments
- At least 1 cross-border
- Must be real IPv6 deployment, not papers and research
- ...otherwise I would not be standing here talking about this 😊

# Obvious and nice IPv6 features



- Seamless connectivity from targeted/affected areas across heterogeneous technologies (e.g. GPRS/UMTS, Satellite, TETRA, ruggedized COTS - WiFi) and cross border and public
- Automatic network/system planning and deployment
- Node and host auto configuration, self organizing and healing network features
- Secure and QoS enabled transmission of data, voice and multimedia rich services supported system

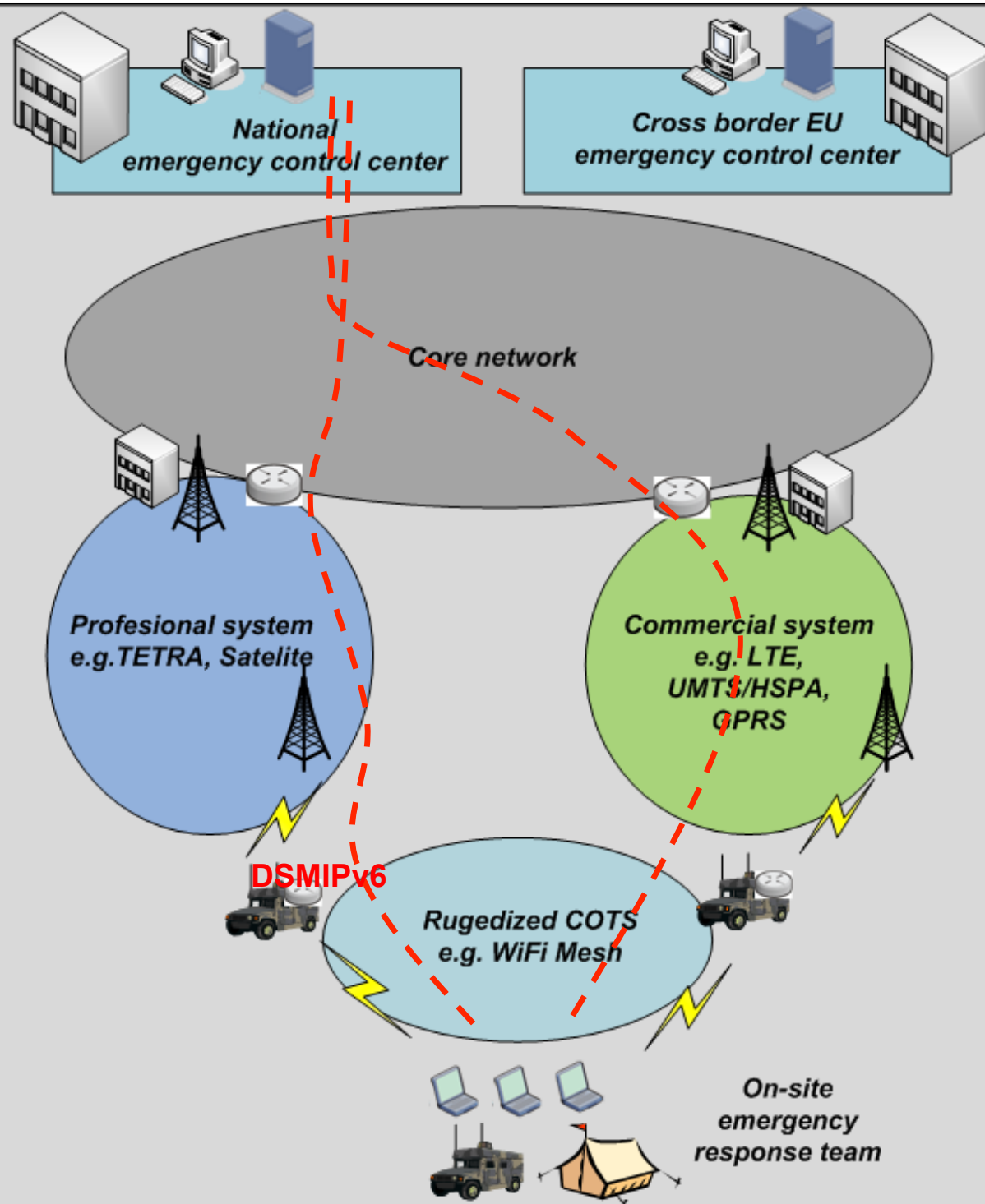
## Not so obvious IPv6 feature



- Overlay network for data transport and service functionalities will be done on DSMIP6-TLS (dual stack mobile IPv6 secured with TLS)

# High system level view

IPv6 enabled self organizing Communication platform for emergency response environments

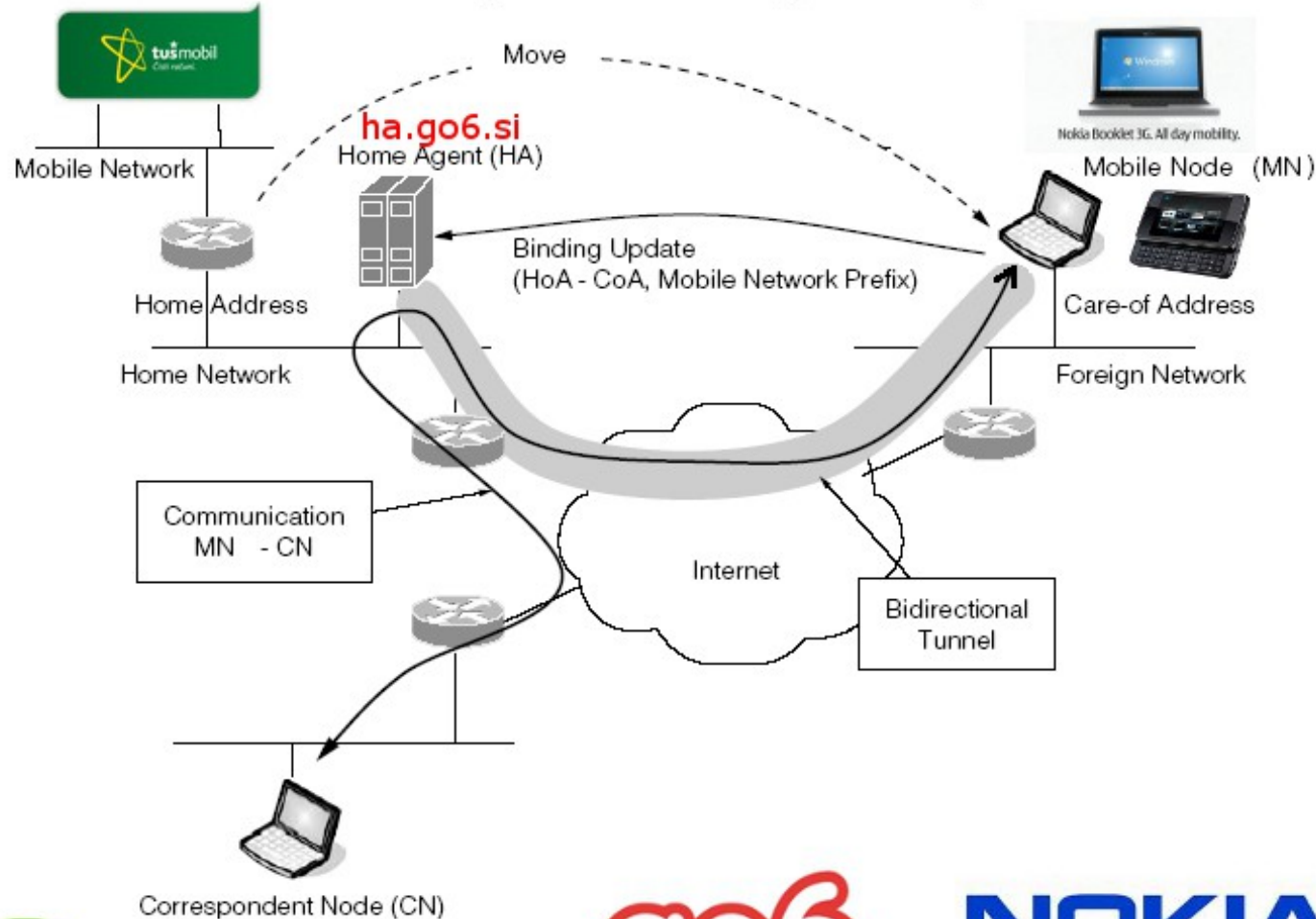


# DSMIP6-TLS current deployment in Slo



## Dual Stack Mobile IPv6

### DSMIPv6-TLS Home Agent server setup, hosted by Tušmobil



Nokia Research Center



**NOKIA**  
CONNECTING PEOPLE

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# Responder always reachable...



- mobile node reachability
  - Ability to connect to mobile node from operations center (initiation of communication in both ways is possible, not only one way)
  - Connect to any service directly (e.g. VOIP call to SIP client, check the temperature on fireman's clothes sensor, engage GPS on MN, send instructions and video, etc...)



# No matter which transport...



- live multimedia streaming, voice, data, and sensor data exchange from the field to the National Emergency Center
- heterogeneous networks/technologies
  - commercial (e.g. GPRS/UMTS/HSPA)
  - professional (e.g. TETRA SYSTEM, Satellite)
  - alternative ruggedized COTS networking systems (e.g. mesh enabled wifi 802.11a/g/n)

## Intended outcome...



- Our experimental deployment proposal needs IPv6 enabled in the whole transport path. That means different parts of governmental network and infrastructure. This way we are encouraging the IPv6 implementation also in other parts of government and public infrastructure

## Intended outcome...



- Outcome of this experimental deployment can be further extended to enhance the mobility of employees of ministries and government in the future, giving them the same working environment wherever they are (e.g. mobile office).

## Intended outcome...



- The experiment will be used as showcase to derive best practices, guidelines, methodologies and toolkits for the migration from IPv4 to IPv6.

# Go6 Q&A

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# Q&A

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