An SDN/NFV Based Network Infrastructure for Public Safety

June 2016

Introducing Argela

Established in 2004 with headquarters in Istanbul. Branches in Ankara, Turkey and Argela-USA in Sunnyvale, CA, USA. Fully owned by Turk Telekom

Provides solutions and network infrastructure components for Telecom Operators, Public Safety and Defense

Specialized in 5G and 5G enabling technologies (SDN&NFV) and generates IPR for these technologies

Already established strong presence in the region with solutions in various telecom operators and expanding globally

Associate Member GSMA

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tmforum

3GPP A GLOBAL INITIATIVE

Member of Network Functions Virtualisation ISG (NFV)

ETSI World Class Standards

ONF OPEN NETWORKING FOUNDATION

Türk Telekom

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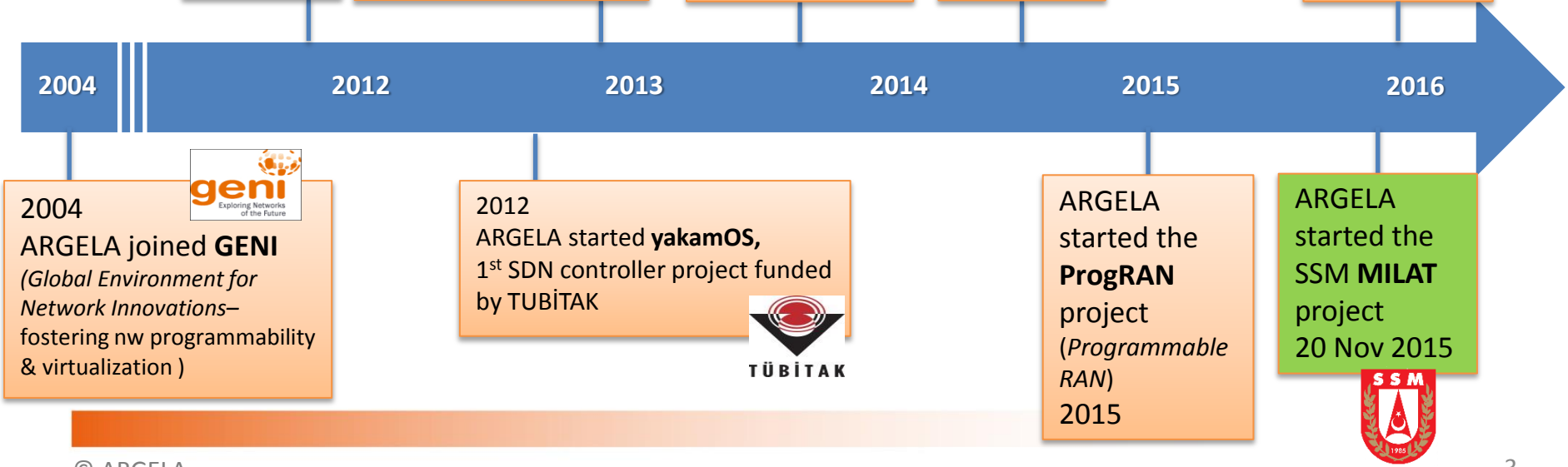
ARGELA's SDN&NFV Experience



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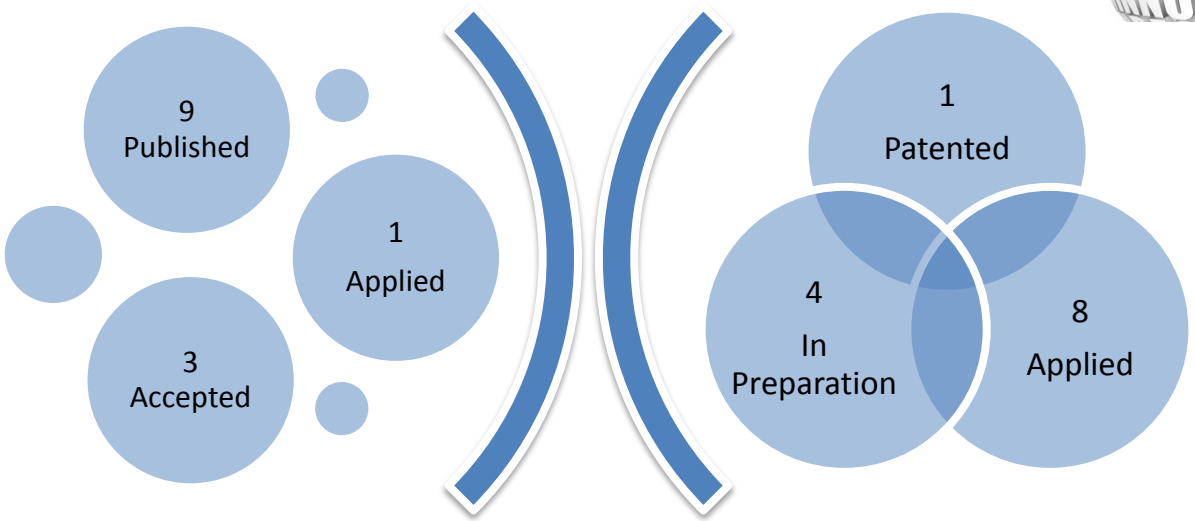
ARGELA's SDN&NFV Experience



13 Papers

14 Patents

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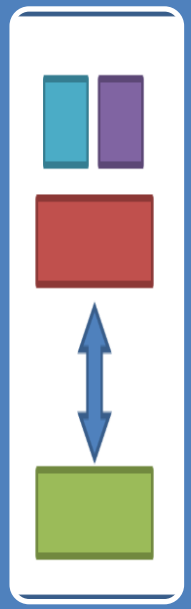

SDN&NFV Based Secure

Network Infrastructure

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R&D Project (Active)

Our work aims:

- *to provide an infrastructure for enabling dynamic cybersecurity and cyberdefense mechanisms*
- *to form a network infrastructure for "Public Safety Network and Applications" like "FirstNet"*
- *to reduce vendor-lockin solutions for mission critical communication infrastructures*
- *to provide security-sensitive dynamic configuration abilities attuned to the exigence of military, public defense and commercial entities*

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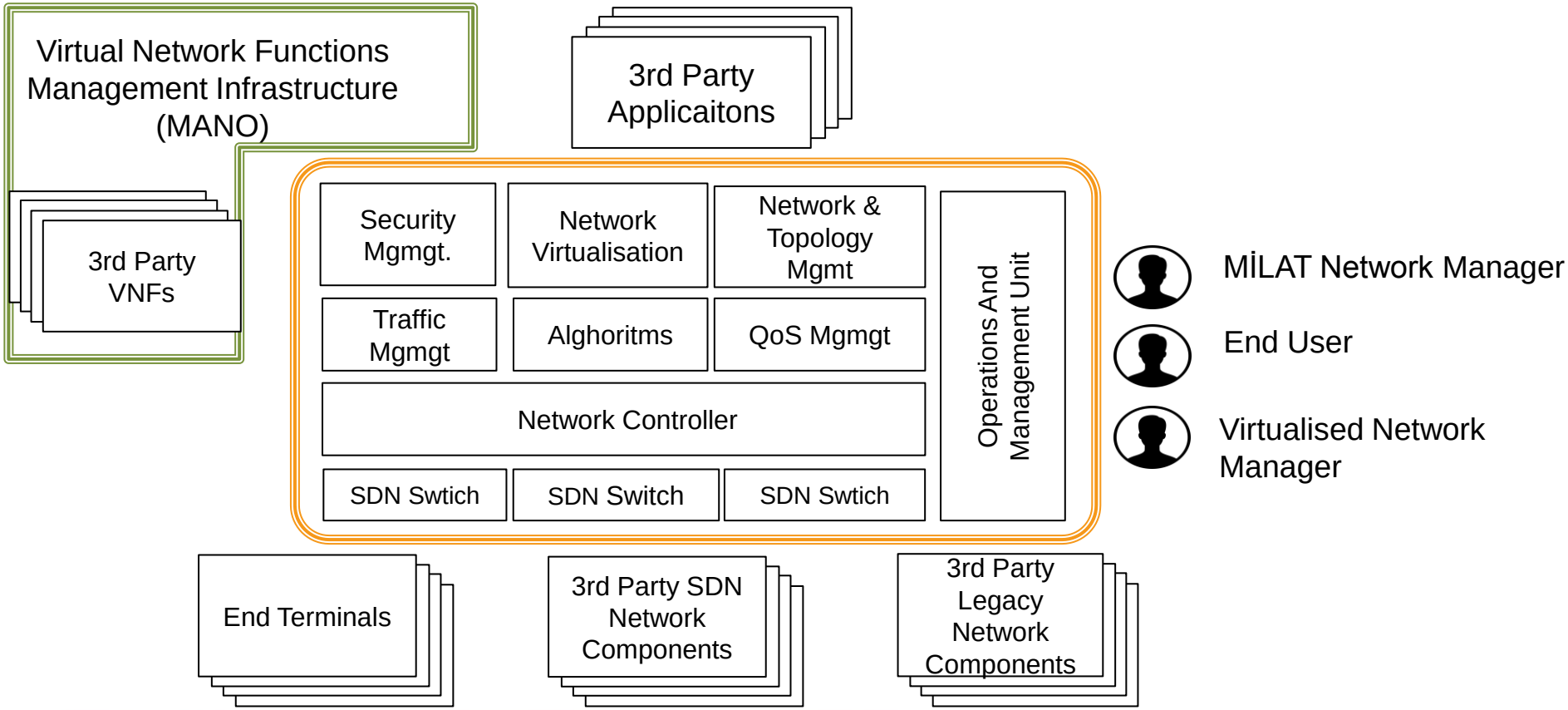
Project Big Picture



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Potential Application Domains

Secure communication infrastructures for Public Safety & Defense

Data center infrastructures

Common Network infrastructure for commercial operators

Network infrastructure for critical systems (e.g. gas/oil pipeline, nuclear powerplant)

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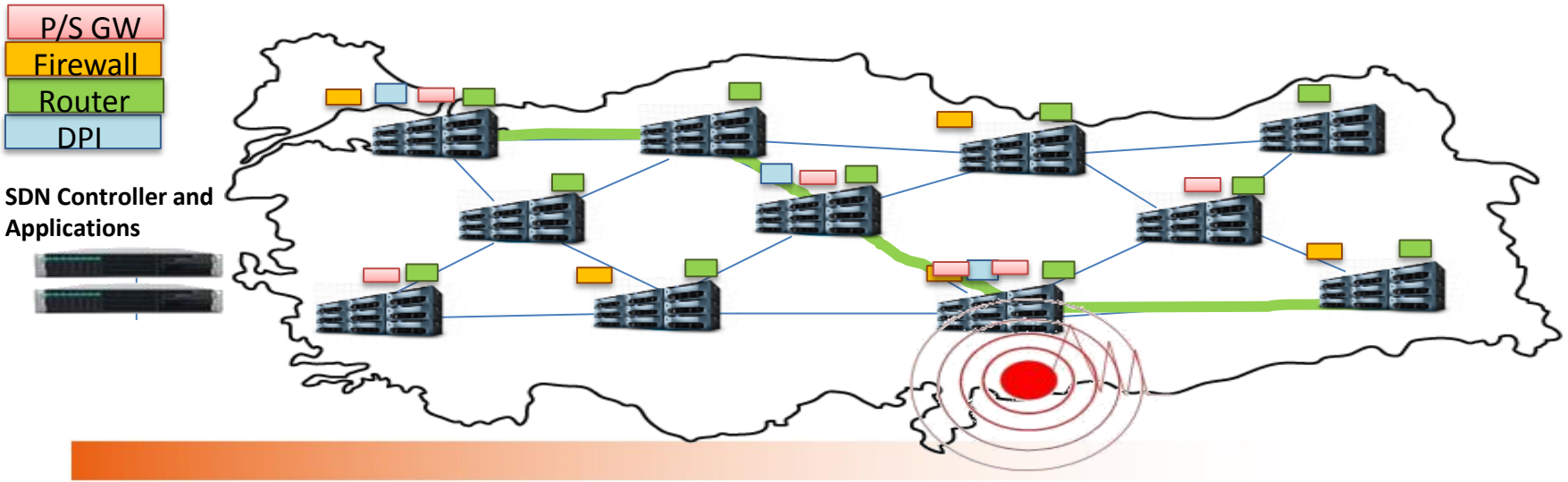
A Sample Scenario

Public Safety & Emergency Network Requirements

- Dynamic resource management in emergency situations (natural disaster, earthquake, etc.)
- Prioritization among users and hierarchy support under necessary conditions



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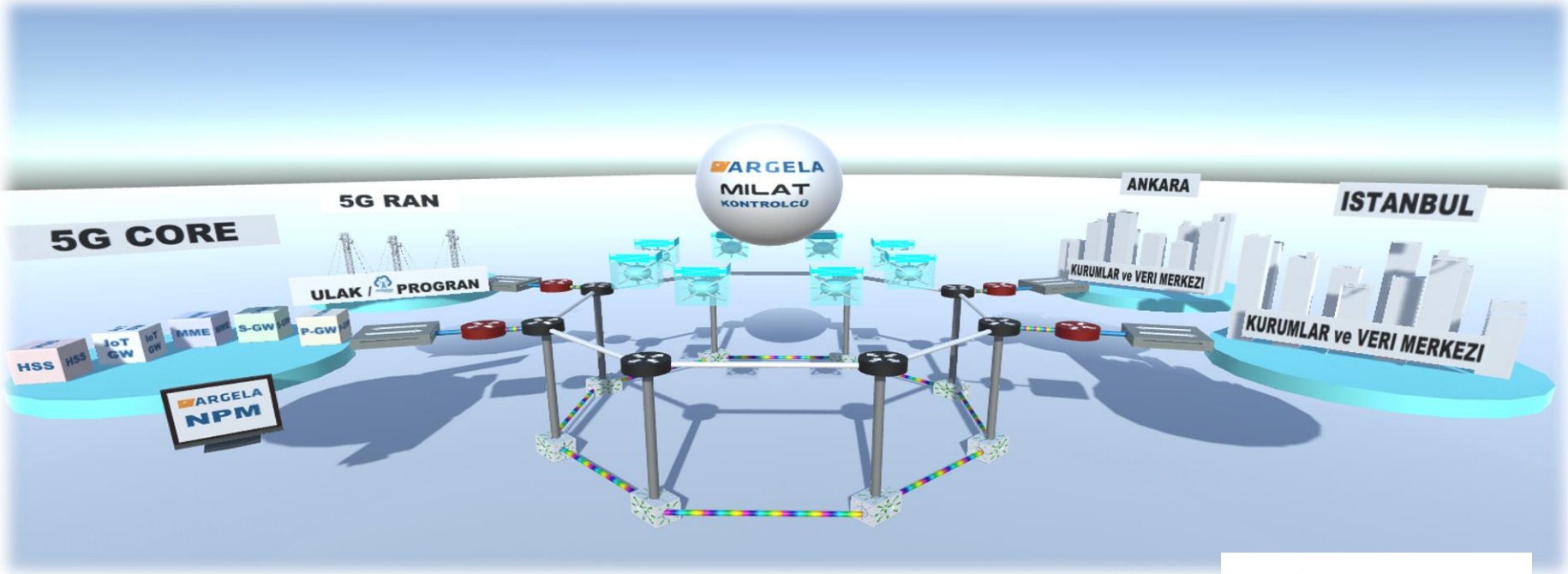
5G Center of Excellence Lab



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Thank You!!

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