Parlay Emergency Telecommunications Service (ETS) Working Group

Ravi Jain, John-Luc Bakker, Ken Erney
Frank Suraci & Vernon Mosley
{rjain,jbakker}@telcordia.com, kenneth.r.erney@saic.com,
{suracif,mosleyv}@ncs.gov

Emergency Telecommunications Workshop
26th -27th February 2002, ETSI, Sophia Antipolis, France

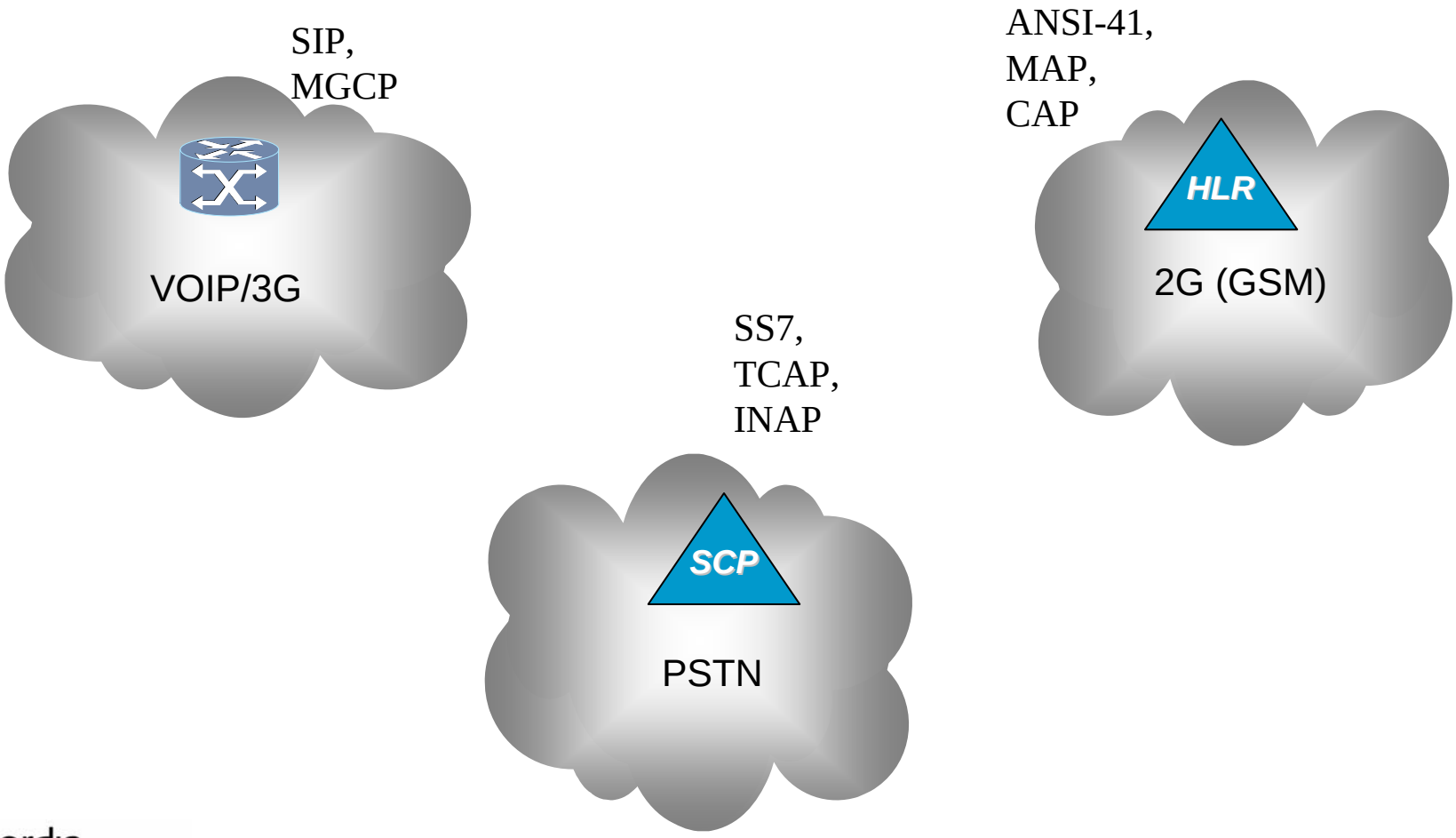
An SAIC Company

Outline

- What is NGN?
- What are NGN APIs?
- ETS enabled APIs
  - Objective of working group
  - ETS overview
  - Parlay/3GPP OSA/ETSI SPAN 12 Architecture
- Parlay ETS Near term activities
- Standardization activities

Telcordia Technologies
Performance from Experience

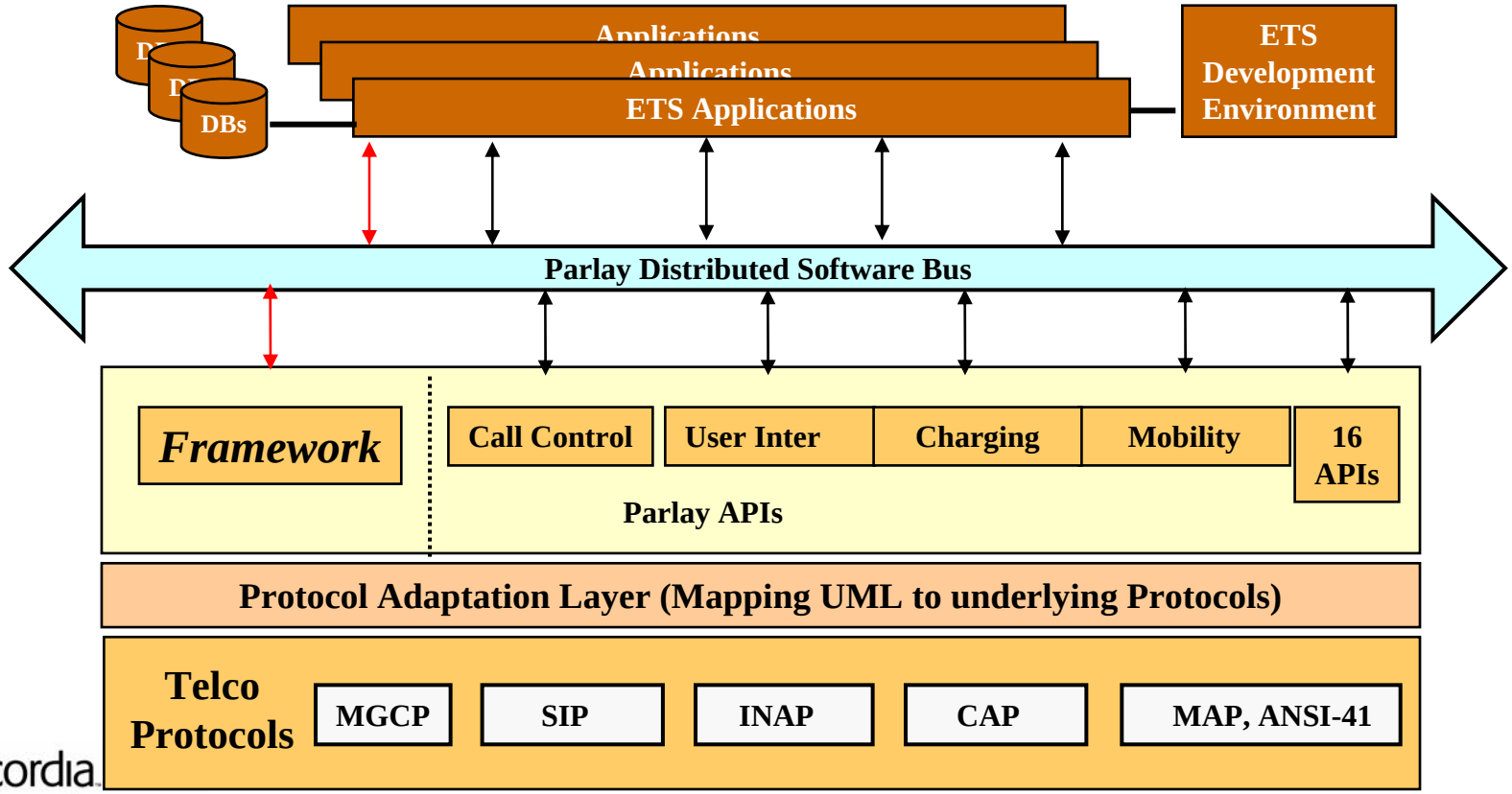
Next Generation Networks



Telcordia Technologies
Performance from Experience

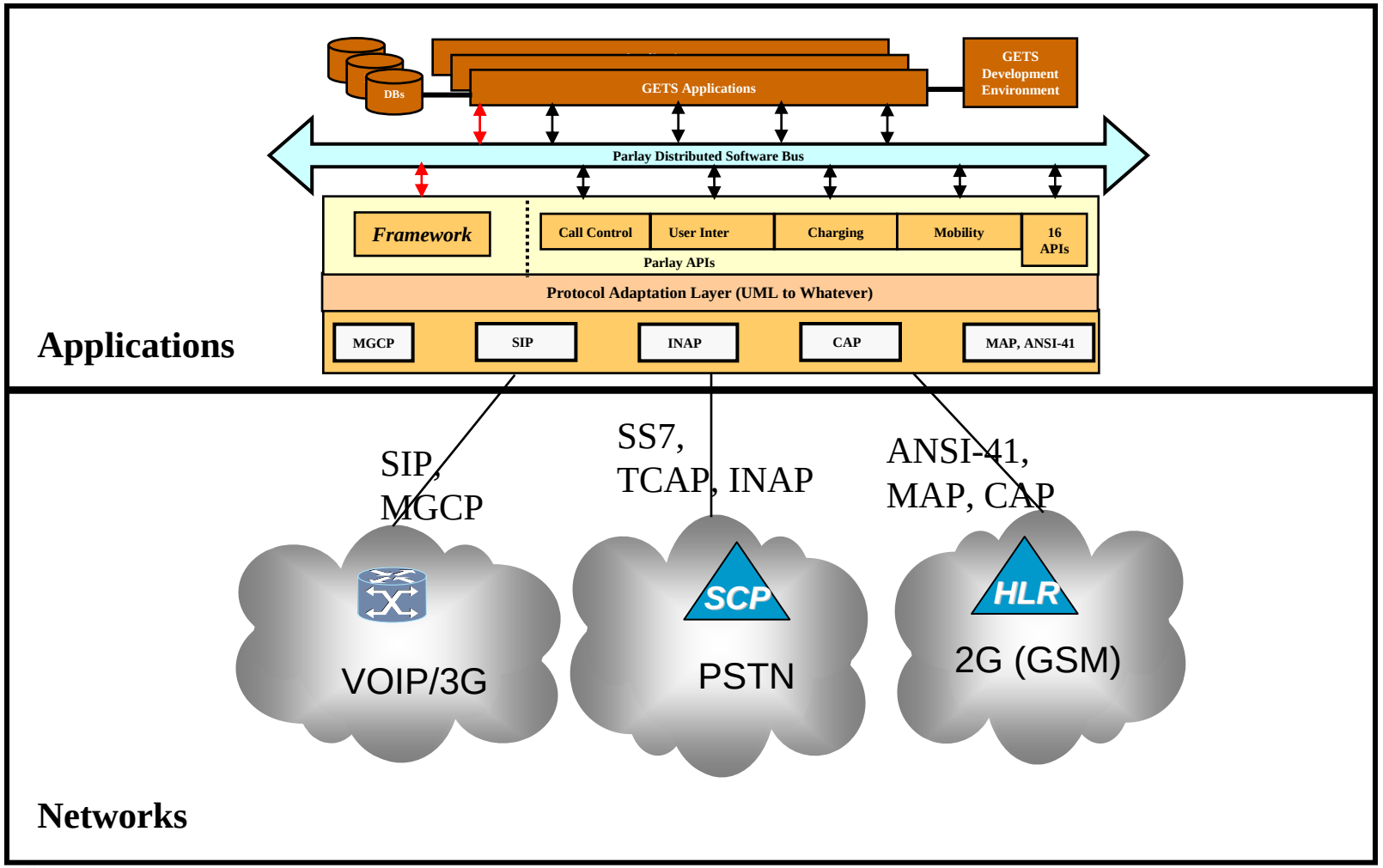
NGN Parlay/OSA Gateway

- 10+ companies doing prototypes, demo's and actual products that enable third party application development based on APIs



Telcordia Technologies
Performance from Experience

Next Generation Network Architecture



Telcordia Technologies
Performance from Experience

APIs for Emergency Telecom Services (ETS)

- The goal is to enable advanced and flexible ETS by allowing services to be developed using open, standard APIs rather than monolithic, stovepiped applications
- Since the Parlay API is applicable to IP, wireless and PSTN any hooks introduced into the API apply to all networks
- The Parlay API actually consists of a set of APIs for call control, mobility, user interaction, etc
- Our first contribution is to put a hook into the call control API so that NGN calls or sessions can get High Probability of Completion
  - This extends the current capabilities possible in the PSTN to IP as well as wireless networks

Telcordia Technologies
Performance from Experience

Objective

- Identify requirements and introduce contributions for Parlay APIs that enable equipment manufacturers, network operators, and service providers to develop and offer a wide range of priority services to authorized users that aid in a high probability of completion for emergency traffic during a crisis situation when networks may be restricted due to damage, congestion or faults

Telcordia Technologies
Performance from Experience

ETS Overview

- ETS enables effective communication for emergency operations during times of severe network congestion due to man-made or natural disasters
  - Basic service includes priority access, user authentication, and enhanced routing, exemption from Network Management Controls
  - Several countries already offer some emergency telecommunications services:
    - Canada: Line Load Control to deliver priority dialtone
    - USA: GETS
    - Japan: “I Am Alive” via web site registration

Telcordia Technologies
Performance from Experience

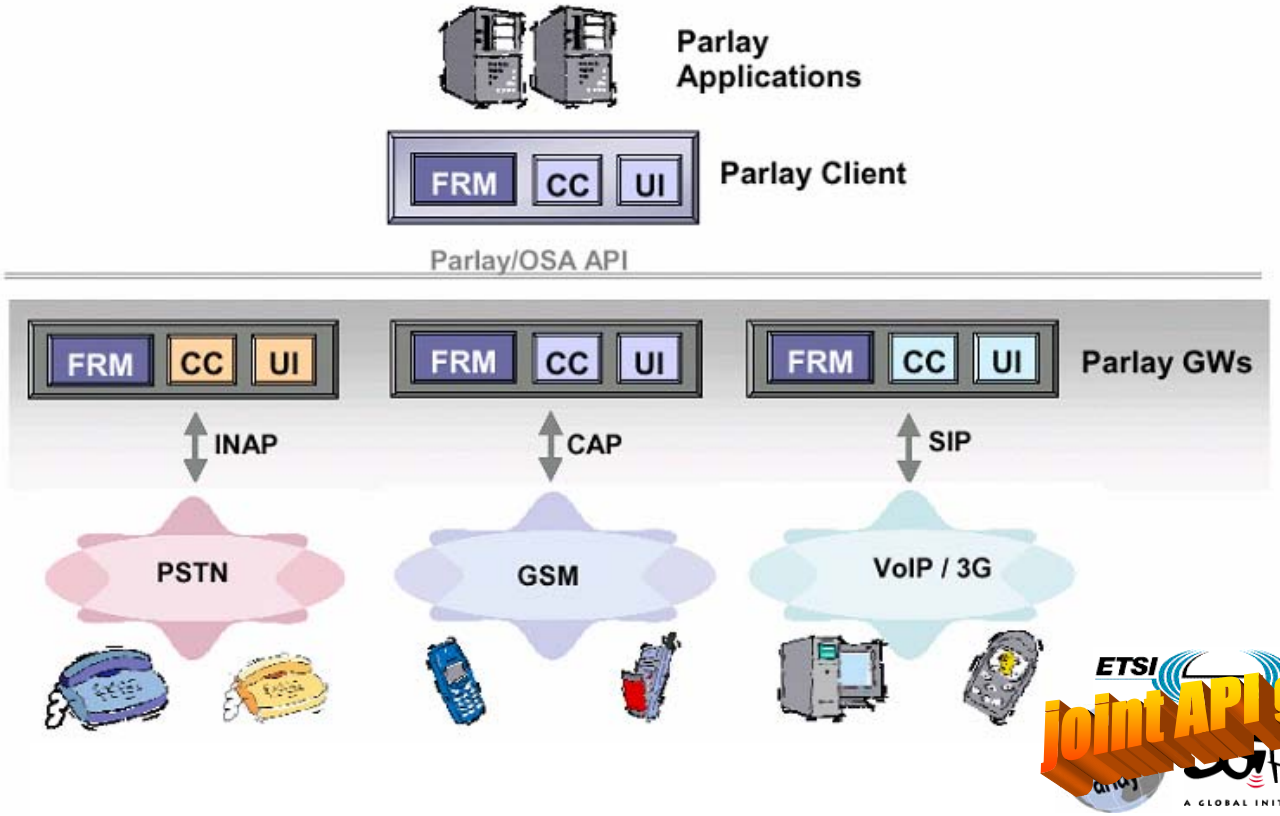
ETS Overview (continued)

- Need to extend A/IN, 3G based and switch-based priority services defined for ETS calls to Next Generation networks and open APIs such as Parlay
- Background white papers etc: http://www.iepscheme.net
  - Vernon Mosley's presentation to the Parlay group at San Diego, 5/23/01
    - See http://www.parlay.org
  - See also IETF Drafts and Recommendations E106, F706
- 3 Parlay ETS proposal presentations have been made at San Diego and in Munich
- Simple example in Parlay: Enhancing Calling_Party_Category parameter for call control by new value

Telcordia Technologies
Performance from Experience

Parlay/3GPP OSA/ETSI SPAN 12 Architecture

- The APIs encapsulate underlying protocols such as SIP or ISUP
- Applications are agnostic of underlying technology and thus highly portable or/and can serve multiple networks (both IP, Mobile, and PSTN)
- There are Call Control APIs, Mobility, Presence, Policy, User Interaction, …



Telcordia Technologies
Performance from Experience

Essential network features for the successful operation of IEPS

Inspired by ITU-T Recommendation E.106

- priority call origination
- priority call setup, including priority queuing schemes
- exemption from restrictive management controls, such as call gapping

Inspired by ITU-T Draft F.706

- extension of other APIs such as Multimedia Call Control, Presence and Availability, Mobility (Location)

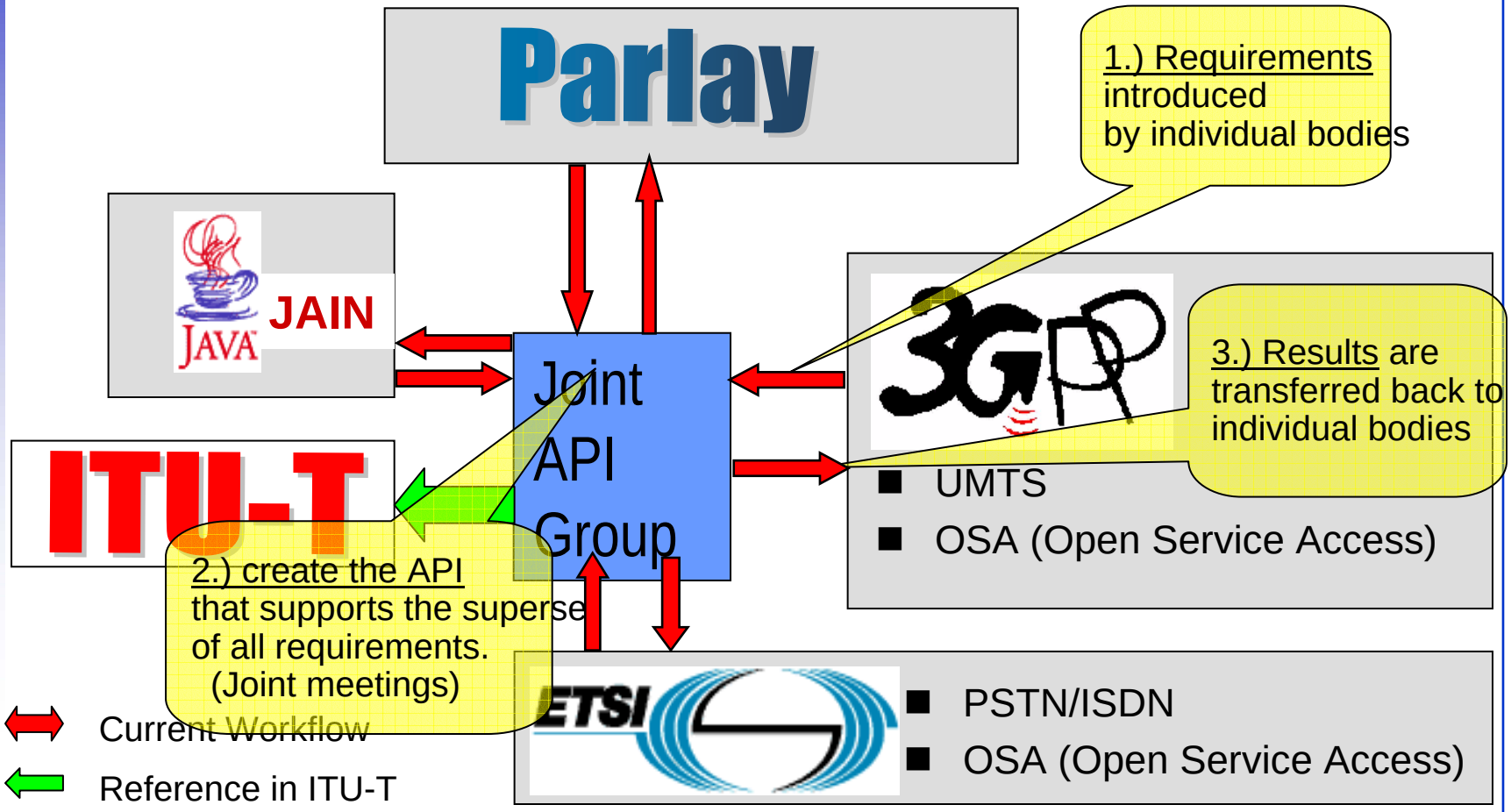
Telcordia Technologies
Performance from Experience

Standardization

- Mid December, the Parlay Group approved the charter for the Parlay ETS Working Group
- During the last Parlay meeting, February 5-7 in Hong Kong, the Parlay ETS Working Group held its first face-to-face
- A contribution was submitted to Joint Working Group such that its APIs would support call marking
  - The contribution was accepted
  - Further contributions ETS enabling the Parlay APIs are in the works!
- 3GPP SA1 does not have an ETS requirement yet (a study group is working in this)
- An IETF working group is proposed, a third BoF discussing its charter is on the agenda for IETF #53

Telcordia Technologies
Performance from Experience

API's for Open Service Access; ONE API for ONE developer community



Telcordia Technologies
Performance from Experience

ETSI joint API group

Questions?

Telcordia Technologies

Performance from Experience