



Liaison Report 802.21 - Session #64

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None.

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802.21 Liaison Report

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Liaison Report IEEE 802.21 work Atlanta – Nov 2009

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802.21



- **Objectives for the week:**
 - **Continue the TG 802.21a harmonization and development**
 - **Continue the TG 802.21b development**
 - **Continue the Single Radio PAR discussion and approval**
 - **Continue the new study group discussion**
Heterogeneous Wireless Networks



802.21a – Security TG



- Work Item 1:
 - Mechanism to reduce the latency during authentication and key establishment for handover between heterogeneous access networks that support IEEE 802.21
- Work Item 2:
 - Mechanism to provide data integrity, replay protection, confidentiality and data origin authentication to IEEE 802.21 MIH protocol exchange and enable authorization for MIH services



802.21a Timeline



Call for Proposal (March 2009)



Proposal Presentation I (May 2009)

Proposals must be submitted 1-week prior to meeting

Done

Harmonization



Proposal Presentation II (July 2009)

Proposals with detailed text must be submitted 1-week prior to meeting

Done

Harmonization



Proposal Presentation III (September 2009)

Proposals with detailed text must be submitted 1-week prior to meeting

Done

Harmonization
Discussion
(November 2009
& January 2010)

Harmonization



Presentation & Down-Selection

(March 2010)

Proposals with **Draft Text** must be submitted 2-week prior to meeting

Down-Selection fails

Down-Selection succeeds 

Draft Standard

Text is contributed to
802.21a draft standard



Regrouping



802.21b – Handover with Broadcast Services

- Objectives
 - Create an amendment to the 802.21-2008 baseline specification to enable support of broadcast services and downlink-only technologies (e.g. DVB, DMB, MediaFLO)
- Status
 - Call for proposals issued in July
 - Two proposals presented at the Atlanta meeting
- Next Step
 - Harmonize proposals and provide detailed text for the January's meeting
 - Down selection to take place in March (if needed)



Proposed new 802.21 TG – Single Radio PAR

- **802.16 members PAR comment:** Why will the released IEEE 802.21-2008 specification not be able to support the proposed scope/project? How is a Media Independent radio handoff, as specified in IEEE802.21-2008, different from a single radio handoff?
 - **802.21 Response:**
 - The IEEE 802.21-2008 specification does not address optimized single radio handovers. There is a need to add detailed description of how such handovers are done, add call flows and indicate how the 802.21 specification works with other entities in different core networks (WiMAX or 3GPP/3GPP2) that are required to make such optimized single radio handovers possible.
- **Discussion of the WiMAX Forum LS:** NWG informed 802.21 about the Single Radio work. NWG is seeking cooperation with the 802.21 WG in defining a complete solution for single radio handovers between WiMAX and other access systems.
- **PAR Status:**
 - Minor modifications made
 - SR concepts further socialized and explained
 - Motion to approve PAR for Single Radio TG approved



Fixed Mobile Convergence Alliance

- FMCA carried out plugfest to test interoperability of 802.21 MIH implementations:
 - Use Cases originally generated by FMCA members
 - Test Cases proposed by 802.21 members
 - Final detailed test cases worked out by FMCA with help from ETSI
 - Event hosted by ETSI at Sophia Antipolis offices, October 5-9, 2009
 - Use cases included 3G, WiFi and WiBro technologies
 - High level of protocol interoperability was achieved, and implementations were also demonstrated at the event
 - IEEE-ISTO Conformity Assessment Program (ICAP) staff also participated in the event
 - FMCA will produce detailed report in a public White Paper by the end of the year
- <https://mentor.ieee.org/802.21/dcn/09/21-09-0192-01-0000-fmca-plugtest-iot-report.ppt>

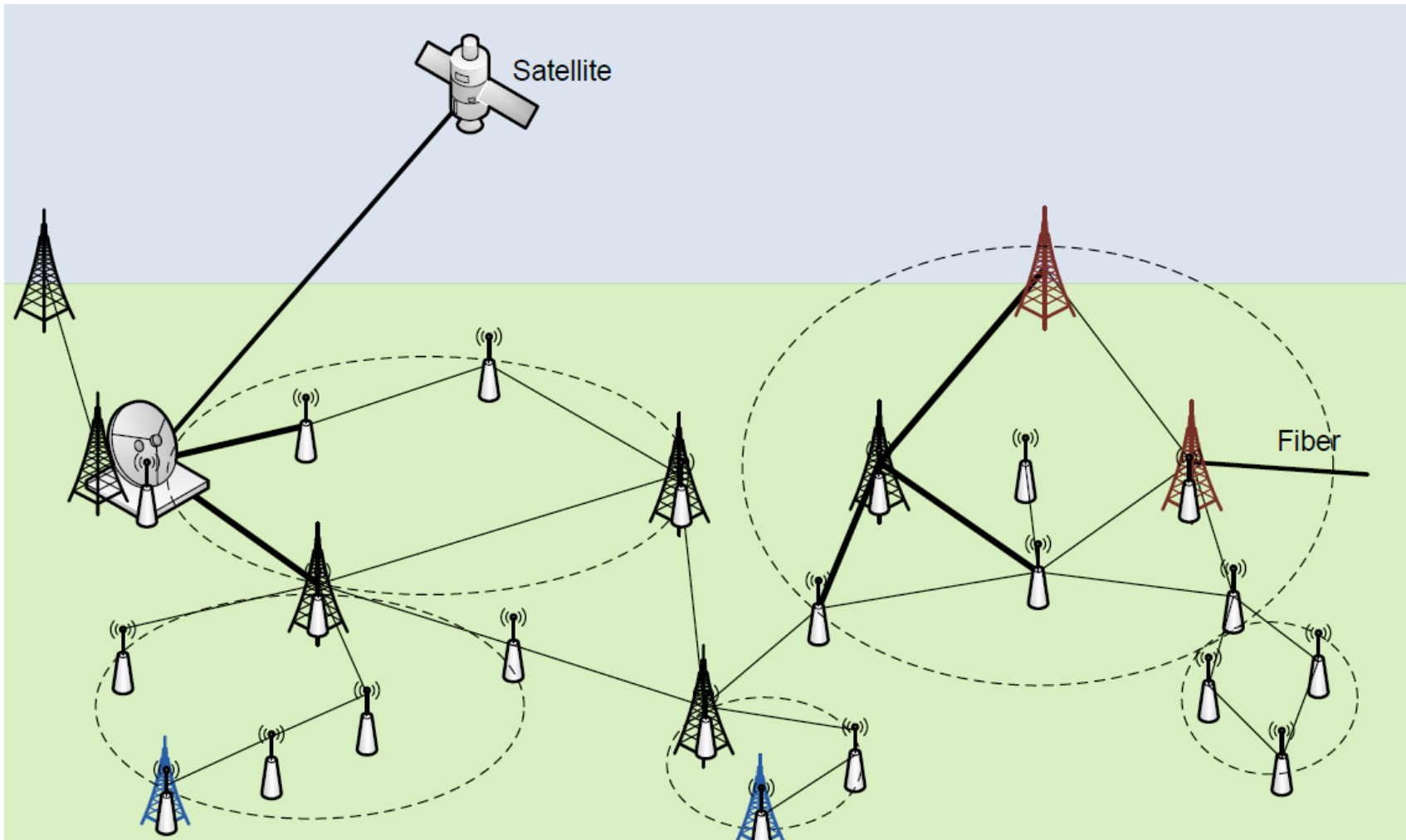


New Proposed 802.21 Study Group Heterogeneous Wireless Networks



- Motion to approve the Study Group passed today
- Short presentation by Dr. Johannes Lessmann (NEC)
 - johannes.lessmann@nw.neclab.eu
 - Some synergy with NRR should be explored, hence this short introduction
- *IEEE 802.21 presently provides* media independent events/commands to **enable/optimize** upper-layer handovers across heterogeneous networks
- *The proposed SG will examine* media independent events/commands to **enable/optimize** upper-layer network configuration across heterogeneous networks

Deployment Scenario



-  WLAN
-  WiMAX
-  DVB-S2
-  DVB-T2



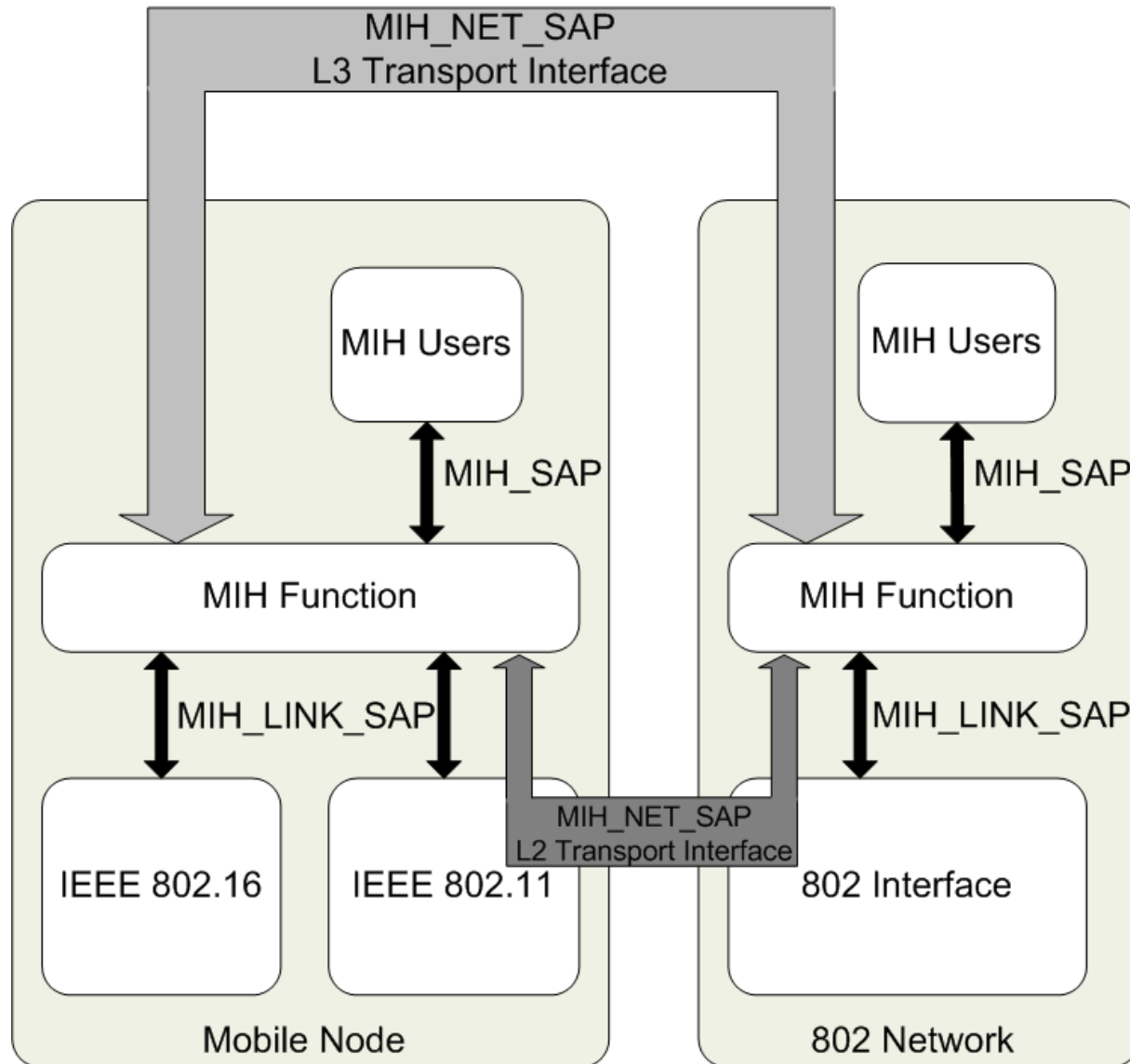
Goals



- Enable configuration of heterogeneous wireless networks in a media independent way
- To this end, **provide link abstraction** focusing on:
 - Neighbor discovery
 - Radio configuration
 - Monitoring
 - Resource Reservation

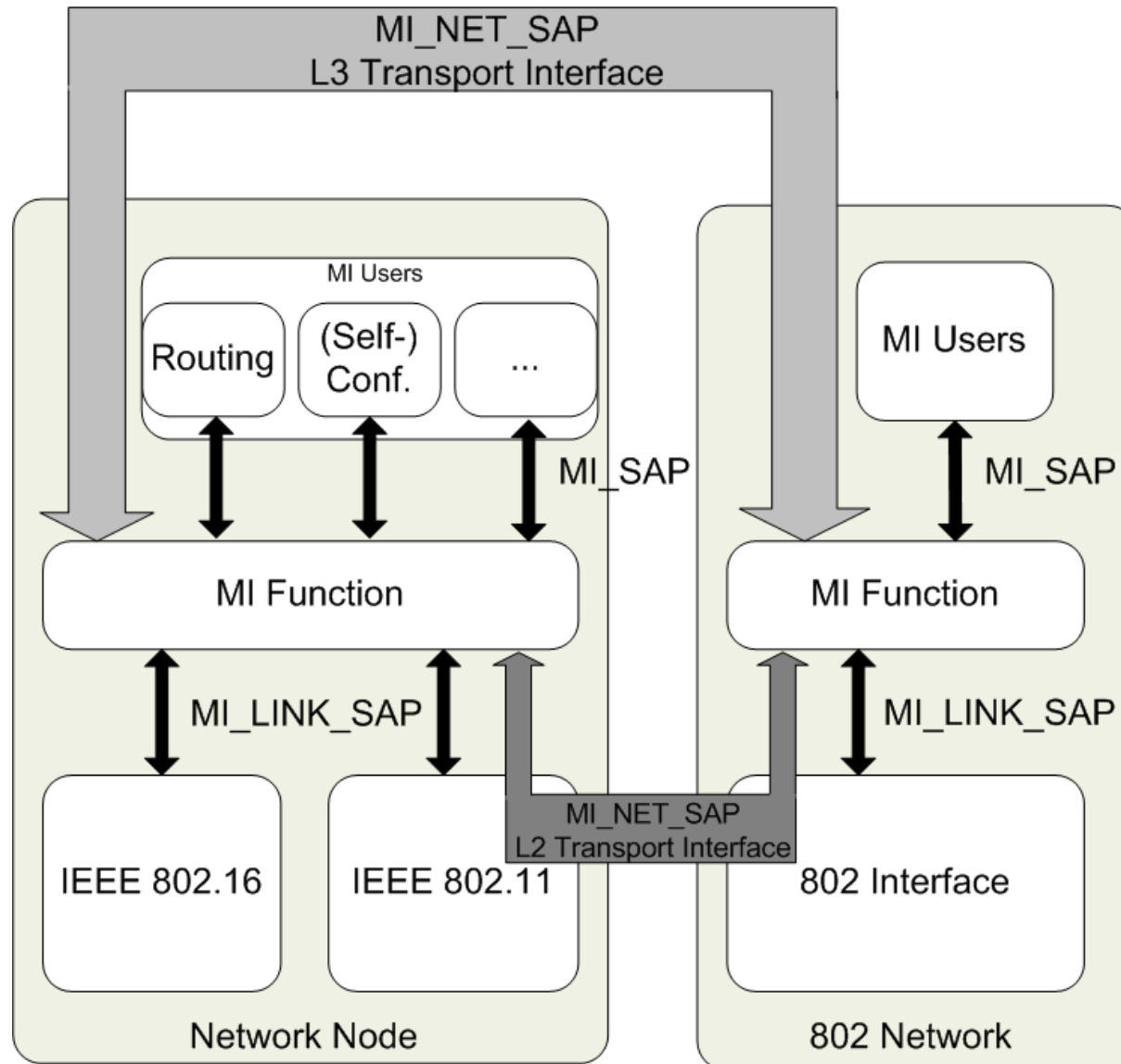


IEEE 802.21 Architecture





Extended IEEE 802.21 Architecture





Tasks of the proposed SG



- Interact with other WGs/TGs to gather technical input from all stakeholders
- Interact with other relevant SDOs
- Evaluate complexity of SG objectives
- Write summary of the SG findings
- Develop a PAR and 5C, if there is enough interest within IEEE 802 community