IEEE 802 LAN/MAN Standards Committee Plenary Session
November 2010 Tutorials and Special Interest Meetings
Monday November 8, 2010

Tutorial #1

Date: Monday November 8, 2010
Time: 6:00 – 7:30 pm
Location: LANDMARK A
Title: Towards Wireless 100 Gb/s beyond 300 GHz
Sponsored by: Dr. Robert Heile (bheile@ieee.org)

Presenter(s) Name:	Affiliation:	Email Address:
Thomas Kürner	TU Braunschweig	t.kuerner@tu-bs.de

Abstract:

This tutorial gives an overview of current issues in the emerging field of THz communications targeting to deliver wireless 100 Gbps over short distances. It starts by providing the motivation for the development of multi-gigabit wireless systems and gives an overview of current technological challenges. A concept for radio channel modeling is presented together with the latest channel investigation results and demonstrations in the corresponding frequency ranges. In the last part of the tutorial an overview about the status quo of the activities of the IEEE 802.15 IGTHz is given and highlights also the hot spectrum issues in conjunction with the preparation of the next ITU World Radio Conference (WRC) in 2012.

Tutorial # 2

Date: Monday November 8, 2010
Time: 7:30 – 9:00 pm
Location: LANDMARK A
Title: Opening Pandora's Toolbox: Key Management Protocols Value, Cost, and Future Proofing
Sponsored by: Dr. Robert Heile (bheile@ieee.org)

Presenter(s) Name:	Affiliation:	Email Address:
Robert Moskowitz	ICSA labs/Verizon Business	robert.moskowitz@icsalabs.com

Abstract:

This tutorial will look over 15 years of developing Key Management Protocols and using them for effective network protection. It will examine how each MAC has unique requirements that cannot be met by a single approach, yet how common elements can be met with common protocols. Further the challenges of evolving security techniques and the need for agility should minimize MAC specific details toward externally developed technologies. Add to this that Key Management is needed at multiple layers and some devices will demand extremely constrained approaches. Finally a direction for each MAC to revisit what has their current and planned usage scenarios and thus Key Management needs and pursue an appropriate effort.

Tutorial # 3

Date: Monday November 8, 2010

Time: 9:00-10:30 pm

Location: LANDMARK A

Title: ASN.1 for More Effective Network Standards

Sponsored by: Roger Marks (r.b.marks@ieee.org)

Presenter(s) Name:	Affiliation:	Email Address:
Alessandro Triglia	OSS Nokalva, Inc.	sandro@oss.com

Abstract:

ASN.1 ("Abstract Syntax Notation One"), as specified in ITU-T Rec. X.680, defines a formalism for the specification of abstract data types as well as several standard encoding rules that encode instances of those abstract data types for transmission. It is widely used in standards describing data exchanged by telecommunications protocols. With the advent of ASN.1 software tools, ASN.1 has been used to generate code that forms the core of a wide variety of messaging systems applications. This tutorial provides a high-level overview of ASN.1 and illustrates how it can be used to make standardized messaging unambiguous and easy to implement with precision. Examples are drawn from the IEEE P802.16m project.