

M - ^O ^N . ^L ^A ^B
C O R D



M. Oğuz Sunay
M-CORD Bi-Weekly Meeting
May 4, 2017

AGENDA

1

CORD RELEASES & M-CORD

Where does M-CORD stand wrt to the CORD release cycle?

2

NEW PARTNERS / COLLABORATORS

We are growing

3

M-CORD PRIORITIES: STATUS UPDATE

Progress report

4

MWC AMERICAS POC PLANNING

Need to form working groups.

5

COMMENTS

Q&A



CORD RELEASES & M-CORD

CORD TIMELINE

DANGEROUS ADDITION

- Refactor XOS
- Refactor build process
- Fabric enhancements
- Expand QA coverage

SHARED DELUSION

- Upgrade to ONOS 1.11
- Upgrade fabric
- Kubernetes / OpenStack Free config
- DPDK / OvS Performance
- Upgrade OpenStack / Ubuntu / MaaS

M-CORD TIMELINE

- Move components to current state of XOS
- ONOS xRAN - Support for ASN.1 + SCTP
- Include OpenSource EPC into release



NEW PARTNERS / COLLABORATORS



PRIORITIES

OPEN SOURCE EPC

A single, multi-vendor, disaggregated EPC will be officially released.

MISSING PIECES: HSS, Diameter Support for MME

DESIRABLE: The possible most recent release

x.RAN INTEGRATION

ONOS will be enhanced to control / configure ends via x.RAN APIs

MISSING PIECES: Availability of x.RAN compliant eNB solutions (software + hardware) at ON.Lab.

DESIRABLE: Help from Radisys, Aricent, Intel and others

PRIVATE LTE

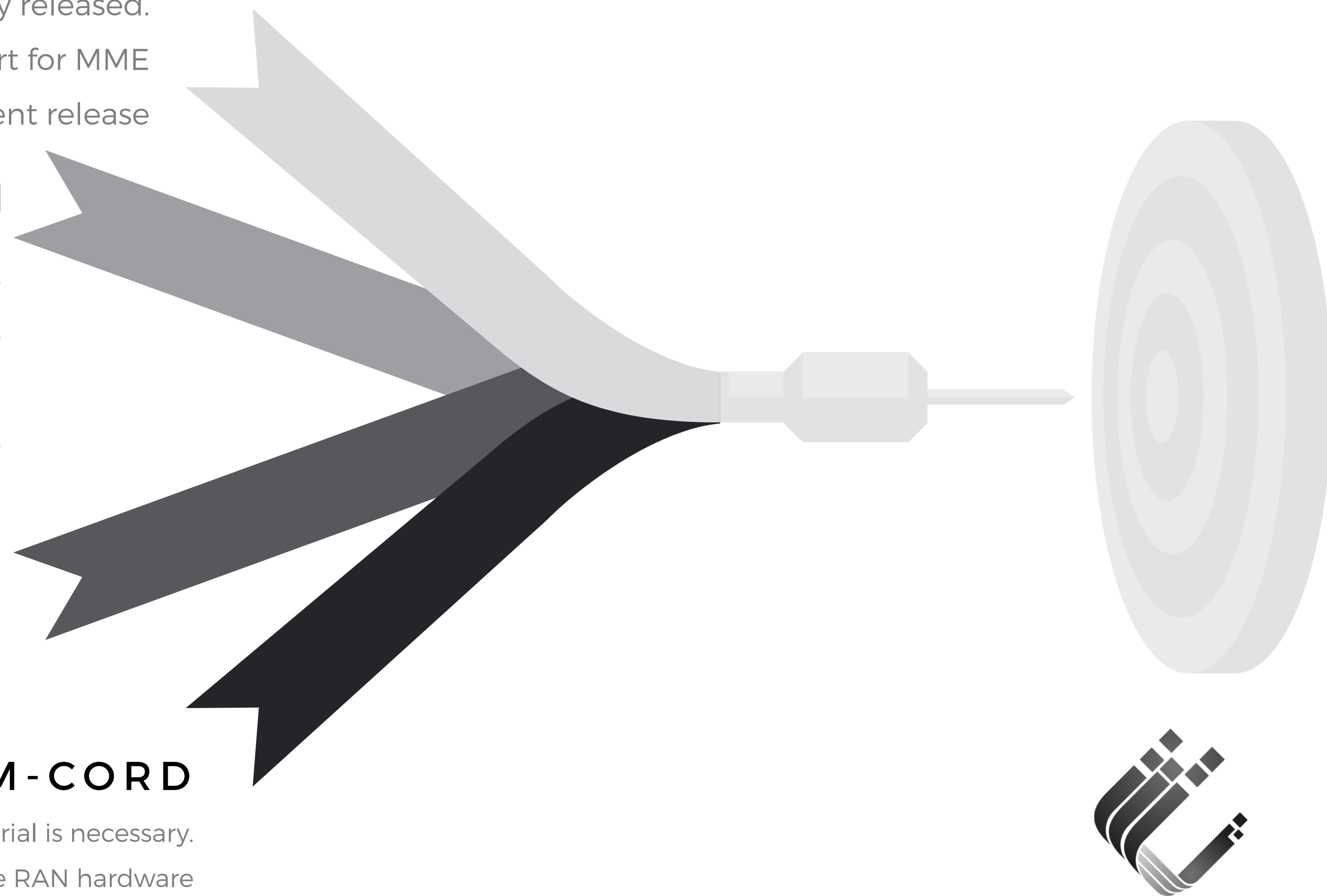
A neutral host private LTE solution framework will be developed.

MISSING PIECES: CBRS Support, Mobile Edge Services

FIELD TRIAL READY M-CORD

RAN and EPC components scalable for a field trial is necessary.

MISSING PIECES: Operator support, deployable RAN hardware



WHERE ARE WE TODAY?

OPEN SOURCE EPC

- Radisys EPC is available
- Intel + Sprint S-GW + P-GW U/C is available
 - S-GW/P-GW-c needs a tighter ONOS integration
- Intel + Sprint has updated Radisys MME to a newer release
- Intel + Sprint has introduced HSS to the Open Source based on OAI Software
- They are now working on the PCRF

x.RAN INTEGRATION

- ONOS - xRAN enB communication is being developed
 - Southbound communication will be ASN.1 + SCTP
- xRAN eNB's need a minor software update for this as well

PRIVATE LTE

- Working on the problem statement and overall architectural design with Verizon.

FIELD TRIAL READY M-CORD

- Moving along with the development of deployment-grade solution



MWC AMERICAS PoCs



MWC AMERICAS
SEPTEMBER 12, 2017
MOSCONE CENTER
SAN FRANCISCO, CA

xRAN

**LINK
AGGREGATION**

**PERFORMANCE
TESTING**

**SON
OPTIMIZATION**

CBRS

**MULTIACCESS
CORD**

**CONNECTIONLESS
v2.0**

ONAP

**NETWORK
COOKIES**

**OPEN SOURCE
EPC v2.0**

M-CORD WORKING GROUPS



PLATFORM

ON.Lab - WG Chair
ITRI
Argela
Cavium ?
Intel ?



CBRS

Google - WG Chair
Accelleran
Argela
Cavium
AT&T



LINK AGGREGATION

Argela - WG Chair
ON.Lab



xRAN

ON.Lab - WG Chair
xRAN
Radisys ?
Xilinx
AirHop



ONAP

AT&T - WG Chair
Xilinx
Argela
Cavium



MULTIACCESS CORD

Deutsche Telecom - WG Chair
AT&T - Co-Chair
Verizon - Co-Chair
Google
ON.Lab



M-CORD WORKING GROUPS



CONNECTIONLESS

AT&T - WG Chair
Intel
ng4t



OPEN SOURCE EPC

Intel - WG Chair
Sprint
ng4t



NETWORK COOKIES

Yiannis Yiakoumis - WG Chair
Argela
Intel
Sprint
XPOSE



PERFORMANCE TESTING

Intel - WG Chair
Ixia
Spirent
ng4t



M-CORD WORKING GROUPS

IT IS EXPECTED THAT THE WORKING GROUPS MEET REGULARLY, AT LEAST ONCE A WEEK.

EACH WORKING GROUP IS MANDATED WITH:

1. DEVELOPING A POC STORY,
2. DETERMINING THE POC ARCHITECTURE & MISSING PIECES,
3. WORKING TOWARDS A SOLUTION.

A DRAFT FOR THE POC STORY FROM EACH WORKING GROUP SHOULD BE PRESENTED AT THE NEXT M-CORD MEETING - IT IS UNDERSTOOD THAT THIS IS A WORK IN PROGRESS AND THUS MAY BE MODIFIED/ENHANCED LATER ON.



QUESTIONS?

