

ORIA 오픈랜·AI-RAN 표준/기술 워크숍

O-RAN TIFG 활동 현황

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진행순서

- I. TIFG
- II. Test Task Group
- III. Certification & Badging Task Group
- IV. OTICs and PlugFest Task Groups
- V. 마무리



+ 표준 문서들

✓ Testing and Integration Focus Group 표준

- TIFG의 표준 문서들
 - O-RAN End-to-end Test Specification 7.0
 - O-RAN Certification and Badging Processes and Procedures 11.0
 - O-RAN Criteria and Guidelines of Open Testing and Integration Centre 6.0
 - O-RAN End-to-End System Testing Framework Specification 1.0
- OTIC 인증(Certification & Badging)에 채택된 시험표준
 - O-RAN Conformance Test Specification 13.0 (O-RAN.WG4.TS.CONF.0-R004-v13.00)
 - O-RAN Fronthaul Interoperability Test Specification (IOT) 13.0 (O-RAN.WG4.TS.IOT.0-R004-v13.00)
 - O-RAN Interoperability Test Specification (IOT) 13.0 (O-RAN.WG5.TS.IOT.0-R004-v13.00)
 - O-RAN End-to-end Test Specification 7.0 (O-RAN.TIFG.TS.E2E-Test.0-R004-v07.00)



+ Task Group 구성

- ✓ Testing and Integration Focus Group 구성
 - 3개의 Task Group으로 구성
 - Test Task Group (TETG)
 - Certification and Badging Task Group (CBTG)
 - OTICs and PlugFest Task Groups (OPTG)



+ Task Group 역할

✓ TETG

- End-to-end test
- O-RAN Test Specification Framework

✓ CBTG

- Certification and Badging Processes and Procedures

✓ OPTG

- *Improvement of quality of O-RAN certificates/badges*
- *OTIC web catalogue update*

+ End-to-end test

- ✓ Profile-based performance test
 - ✓ 성능 시험에서의 변수 값 등 Operator들의 요구사항 수용
 - ✓ Number of UEs
 - ✓ Radio channel impairments
 - ✓ Transport network impairments
 - ✓ Mobility profiles
 - ✓ Mixed end users' services & application traffic
 - ✓ Traffic pattern parameters
 - ✓ Multiple cells/O-RU test scenarios
 - ✓ Randomization of traffic patterns

+ O-RAN Test Specification Framework

- ✓ Test Specification Framework 탄생 배경
 - WG/FG 마다 상이한 용어 사용
 - 모호성(이 Test Case를 포함해야 하는지)
 - 여러 문서에 걸쳐 분산
- 목표
 - 모호성 개선 및 일관성 확보
- ✓ V1.0 (~ July 2025)
 - TIFG 내부 합의는 완료
 - 타 WG들의 Framework 적용에 대한 진척 상황을 보면서 진행 (Nov 이후)

+ Certification and Badging Processes and Procedures 12.0

- ✓ 이전 버전과의 차이점
 - Product owner의 Cert & Badging 요구
 - A1 service에 대한 Cert & Badging 포함
 - O-RAN A1 interface: Test Specification (O-RAN.WG2.TS.A1TS-R004)
 - A1 service에 대한 CB-Profile & CB-ICS Proforma 정의
- ✓ O-RAN Security Assurance Program (with WG11) 적용
 - ICS for O-RU security

+ O-RAN Security Test and Assurance Program

- ✓ SAP(Security Assurance Program)
 - O-RAN Threat model & Risk assessment
 - O-RAN SRCS(Security Requirements and Control Specification) & SPS(Security Protocols Specification)
 - O-RAN STS(Security Testing Specification)
- ✓ with WG11
 - ICS for O-RU /O-DU security
 - O-RAN Security Assurance Program을 O-RAN Certification & Badging program으로 편입하는 방안

Items	Responsible Group	Collaborating Group
STS (Security Test Specification)	WG11	
SCASs (Security Assurance Specification)	WG11	
SAP TR(Technical Report)	WG11	TIFG
S-ICS TRs	WG11	TIFG
GSMA NESAS*	WG11	

* O-RAN scheme vs. NESAS scheme

IV OPTG

+ C&B report

- ✓ 인증 제품 목록 (Catalogue)에 대한 O-RAN Member(Operator)들의 열람 요구
 - 기존)
 - 해당 OTIC에서 처리
 - 처리 시간이 유동적
 - 변경안)
 - O-RAN 사무국에서 C&B report를 보관, 요청 시 직접 대응

+ TIFG

- ✓ O-RAN Test Specification Framework 을 제공해 줌으로써 모호성 개선 및 WG/FG간 일관성 확보
- ✓ O-RAN Security Assurance Program 준비
 - O-RAN schema

감사합니다

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