Working Document 2023-08-11

**Legend:**

The following lines define the color coding for the steps of the process.

**Step #0:** Ignore

**Step #1:** Identify onf-air-interface PM data, which are not covered by ietf.

**Step #2:** Ignore status attributes which are covered by NMDA.

**Step #3:** Identify onf-air-interface **configuration** attributes which are not covered by ietf.

**Step #4:** Identify onf-air-interface **status** attributes which are not covered by ietf.

**Step #5:** updates on Capabilities if needed.

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**module: air-interface-2-0**

augment /core-model:control-construct/core-model:logical-termination-point/core-model:layer-protocol:

+--rw air-interface-pac

**+--ro air-interface-capability**

| +--ro type-of-equipment? string

| +--ro tx-frequency-min? int32

| +--ro tx-frequency-max? int32

| +--ro rx-frequency-min? int32

| +--ro rx-frequency-max? int32

| +--ro duplex-distance-is-freely-configurable? boolean

| +--ro duplex-distance-list\* int32

| +--ro transmission-mode-list\* [transmission-mode-name]

| | +--ro transmission-mode-name string

| | +--ro transmission-mode-rank? int32

| | +--ro channel-bandwidth? int32

| | +--ro modulation-scheme? int16

| | +--ro code-rate? int8

| | +--ro symbol-rate-reduction-factor? int8

| | +--ro tx-power-min? int8

| | +--ro tx-power-max? int8

| | +--ro rx-threshold? int16

| | +--ro am-upshift-level? int8

| | +--ro am-downshift-level? int8

| | +--ro xpic-is-avail? boolean

| | +--ro supported-as-fixed-configuration? boolean

| | +--ro modulation-scheme-name-at-lct? string

| +--ro auto-freq-select-is-avail? boolean

| +--ro receiver-on-off-is-avail? boolean

| +--ro adaptive-modulation-is-avail? boolean

| +--ro atpc-is-avail? boolean

| +--ro atpc-range? int8

| +--ro supported-radio-signal-id-datatype? radio-signal-id-datatype-type

| +--ro supported-radio-signal-id-length? int16

| +--ro expected-equals-transmitted-radio-signal-id? boolean

| +--ro encryption-is-avail? boolean

| +--ro supported-loop-back-kind-list\* loop-back-type

| +--ro maintenance-timer-range? string

| +--ro acm-threshold-cross-alarms-is-avail? boolean

| +--ro clearing-threshold-cross-alarms-is-avail? boolean

| +--ro performance-monitoring-is-avail? boolean

| +--ro direction-of-acm-performance-values? direction-type

**+--rw air-interface-configuration**

| +--rw air-interface-name? string

| +--rw remote-air-interface-name? string

| +--rw transmitted-radio-signal-id

| | +--rw numeric-radio-signal-id? int32

| | +--rw alphanumeric-radio-signal-id? string

| +--rw expected-radio-signal-id

| | +--rw numeric-radio-signal-id? int32

| | +--rw alphanumeric-radio-signal-id? string

| +--rw tx-frequency? int32

| +--rw rx-frequency? int32

| +--rw duplex-distance? int32

| +--rw transmission-mode-min? -> /core-model:control-construct/logical-termination-point[core-model:uuid = current()/../../../../uuid]/layer-protocol[core-model:local-id = current()/../../../local-id]/air-interface:air-interface-pac/air-interface-capability/transmission-mode-list/transmission-mode-name

| +--rw transmission-mode-max? -> /core-model:control-construct/logical-termination-point[core-model:uuid = current()/../../../../uuid]/layer-protocol[core-model:local-id = current()/../../../local-id]/air-interface:air-interface-pac/air-interface-capability/transmission-mode-list/transmission-mode-name

| +--rw power-is-on? boolean

| +--rw transmitter-is-on? boolean

| +--rw receiver-is-on? boolean

| +--rw tx-power? int8

| +--rw adaptive-modulation-is-on? boolean

| +--rw xpic-is-on? boolean

| +--rw mimo-is-on? boolean

| +--rw alic-is-on? boolean

| +--rw atpc-is-on? boolean

| +--rw atpc-thresh-upper? int16

| +--rw atpc-thresh-lower? int16

| +--rw atpc-tx-power-min? int8

| +--rw auto-freq-select-is-on? boolean

| +--rw auto-freq-select-range? int8

| +--rw modulation-is-on? boolean

| +--rw encryption-is-on? boolean

| +--rw cryptographic-key? string

| +--rw loop-back-kind-on? loop-back-type

| +--rw maintenance-timer? int32

| +--rw g-826-threshold-cross-alarm-list\* [g-826-value-kind granularity-period]

| | +--rw g-826-value-kind g-826-type

| | +--rw alarm-raising-threshold? int32

| | +--rw alarm-clearing-threshold? int32

| | +--rw granularity-period granularity-period-type

| +--rw xlts-threshold-cross-alarm-list\* [level-threshold-second-kind granularity-period xlts-threshold-cross-alarm-definition-number]

| | +--rw level-threshold-second-kind xlevel-threshold-second-kind-type

| | +--rw xlts-level? int8

| | +--rw amount-of-seconds? int32

| | +--rw granularity-period granularity-period-type

| | +--rw xlts-threshold-cross-alarm-definition-number int8

| +--rw acm-threshold-cross-alarm-list\* [acm-threshold-cross-alarm-definition-number granularity-period]

| | +--rw acm-threshold-cross-alarm-definition-number int8

| | +--rw transmission-mode? -> /core-model:control-construct/logical-termination-point[core-model:uuid = current()/../../../../../uuid]/layer-protocol[core-model:local-id = current()/../../../../local-id]/air-interface:air-interface-pac/air-interface-capability/transmission-mode-list/transmission-mode-name

| | +--rw seconds-for-raising-alarm? int32

| | +--rw seconds-for-clearing-alarm? int32

| | +--rw granularity-period granularity-period-type

| +--rw performance-monitoring-is-on? Boolean

**+--ro air-interface-status**

| +--ro interface-status? interface-status-type

| +--ro tx-frequency-cur? int32

| +--ro rx-frequency-cur? int32

| +--ro transmission-mode-cur? -> /core-model:control-construct/logical-termination-point/layer-protocol/air-interface:air-interface-pac/air-interface-capability/transmission-mode-list/transmission-mode-name

| +--ro received-radio-signal-id

| | +--ro numeric-radio-signal-id? int32

| | +--ro alphanumeric-radio-signal-id? string

| +--ro link-is-up? boolean

| +--ro xpic-is-up? boolean

| +--ro mimo-is-up? boolean

| +--ro alic-is-up? boolean

| +--ro atpc-is-up? boolean

| +--ro auto-freq-select-is-up? boolean

| +--ro local-end-point-id? string

| +--ro remote-end-point-id? string

| +--ro loop-back-kind-up? loop-back-type

| +--ro performance-monitoring-is-up? boolean

| +--ro rx-level-cur? int8

| +--ro tx-level-cur? int8

| +--ro snir-cur? int8

| +--ro xpd-cur? int8

| +--ro rf-temp-cur? int8

**+--ro air-interface-current-performance**

| +--ro current-performance-data-list\* [granularity-period]

| | +--ro performance-data

| | | +--ro es? int32

| | | +--ro ses? int32

| | | +--ro cses? int32

| | | +--ro unavailability? int32

| | | +--ro tx-level-min? int8

| | | +--ro tx-level-max? int8

| | | +--ro tx-level-avg? int8

| | | +--ro rx-level-min? int8

| | | +--ro rx-level-max? int8

| | | +--ro rx-level-avg? int8

| | | +--ro time-xstates-list\* [time-xstate-sequence-number]

| | | | +--ro time-xstate-sequence-number int8

| | | | +--ro transmission-mode? -> /core-model:control-construct/logical-termination-point/layer-protocol/air-interface:air-interface-pac/air-interface-capability/transmission-mode-list/transmission-mode-name

| | | | +--ro time? int32

| | | +--ro snir-min? int8

| | | +--ro snir-max? int8

| | | +--ro snir-avg? int8

| | | +--ro xpd-min? int8

| | | +--ro xpd-max? int8

| | | +--ro xpd-avg? int8

| | | +--ro rf-temp-min? int8

| | | +--ro rf-temp-max? int8

| | | +--ro rf-temp-avg? int8

| | | +--ro defect-blocks-sum? int16

| | | +--ro time-period? int32

| | +--ro timestamp? yang:date-and-time

| | +--ro suspect-interval-flag? boolean

| | +--ro elapsed-time? int64

| | +--ro scanner-id? string

| | +--ro granularity-period granularity-period-type

| +--ro number-of-current-performance-sets? int8

**+--ro air-interface-historical-performances**

+--ro historical-performance-data-list\* [granularity-period period-end-time]

| +--ro performance-data

| | +--ro es? int32

| | +--ro ses? int32

| | +--ro cses? int32

| | +--ro unavailability? int32

| | +--ro tx-level-min? int8

| | +--ro tx-level-max? int8

| | +--ro tx-level-avg? int8

| | +--ro rx-level-min? int8

| | +--ro rx-level-max? int8

| | +--ro rx-level-avg? int8

| | +--ro time-xstates-list\* [time-xstate-sequence-number]

| | | +--ro time-xstate-sequence-number int8

| | | +--ro transmission-mode? -> /core-model:control-construct/logical-termination-point/layer-protocol/air-interface:air-interface-pac/air-interface-capability/transmission-mode-list/transmission-mode-name

| | | +--ro time? int32

| | +--ro snir-min? int8

| | +--ro snir-max? int8

| | +--ro snir-avg? int8

| | +--ro xpd-min? int8

| | +--ro xpd-max? int8

| | +--ro xpd-avg? int8

| | +--ro rf-temp-min? int8

| | +--ro rf-temp-max? int8

| | +--ro rf-temp-avg? int8

| | +--ro defect-blocks-sum? int16

| | +--ro time-period? int32

| +--ro suspect-interval-flag? boolean

| +--ro history-data-id? string

| +--ro granularity-period granularity-period-type

| +--ro period-end-time yang:date-and-time

+--ro number-of-historical-performance-sets? int16

+--ro time-of-latest-change? yang:date-and-time

rpcs:

+---x clear-threshold-cross-alarms

+---w input

+---w affected-air-interface? -> /core-model:control-construct/logical-termination-point/uuid

notifications:

+---n object-creation-notification

| +--ro counter? int32

| +--ro timestamp? yang:date-and-time

| +--ro object-id-ref? -> /core-model:control-construct/logical-termination-point/uuid

| +--ro object-type? string

+---n object-deletion-notification

| +--ro counter? int32

| +--ro timestamp? yang:date-and-time

| +--ro object-id-ref? -> /core-model:control-construct/logical-termination-point/uuid

+---n attribute-value-changed-notification

+--ro counter? int32

+--ro timestamp? yang:date-and-time

+--ro object-id-ref? -> /core-model:control-construct/logical-termination-point/uuid

+--ro attribute-name? string

+--ro new-value? string