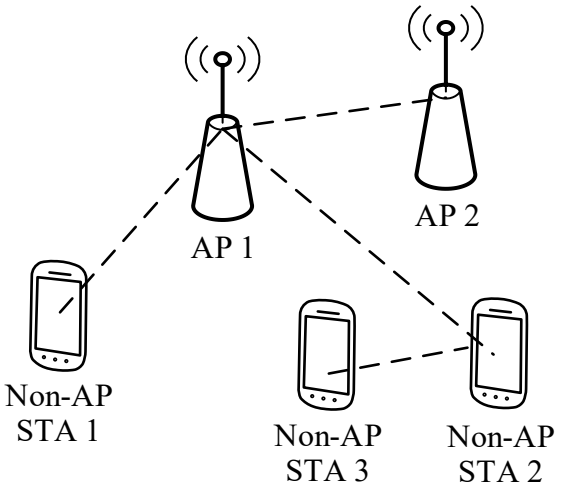
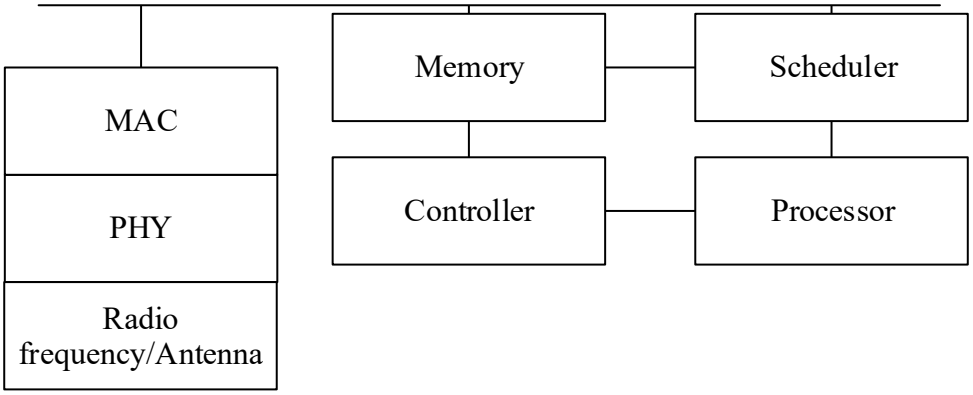
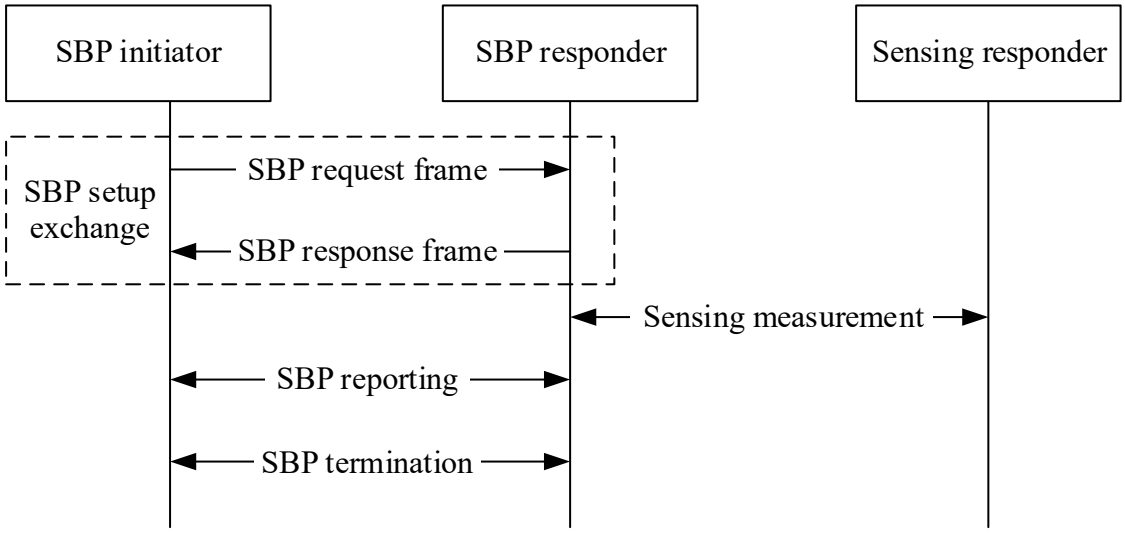
[FIG. 1]



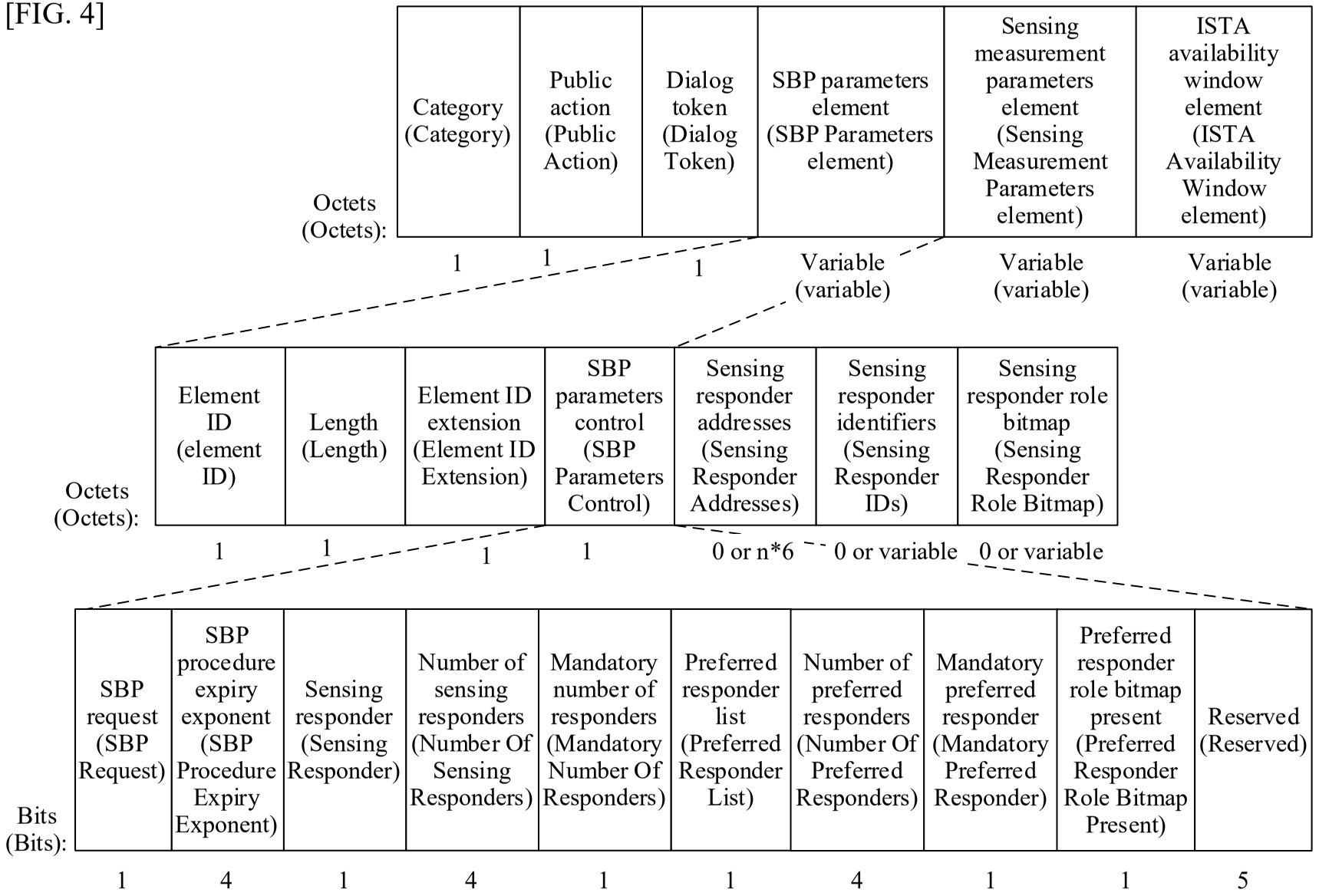

[FIG. 2]



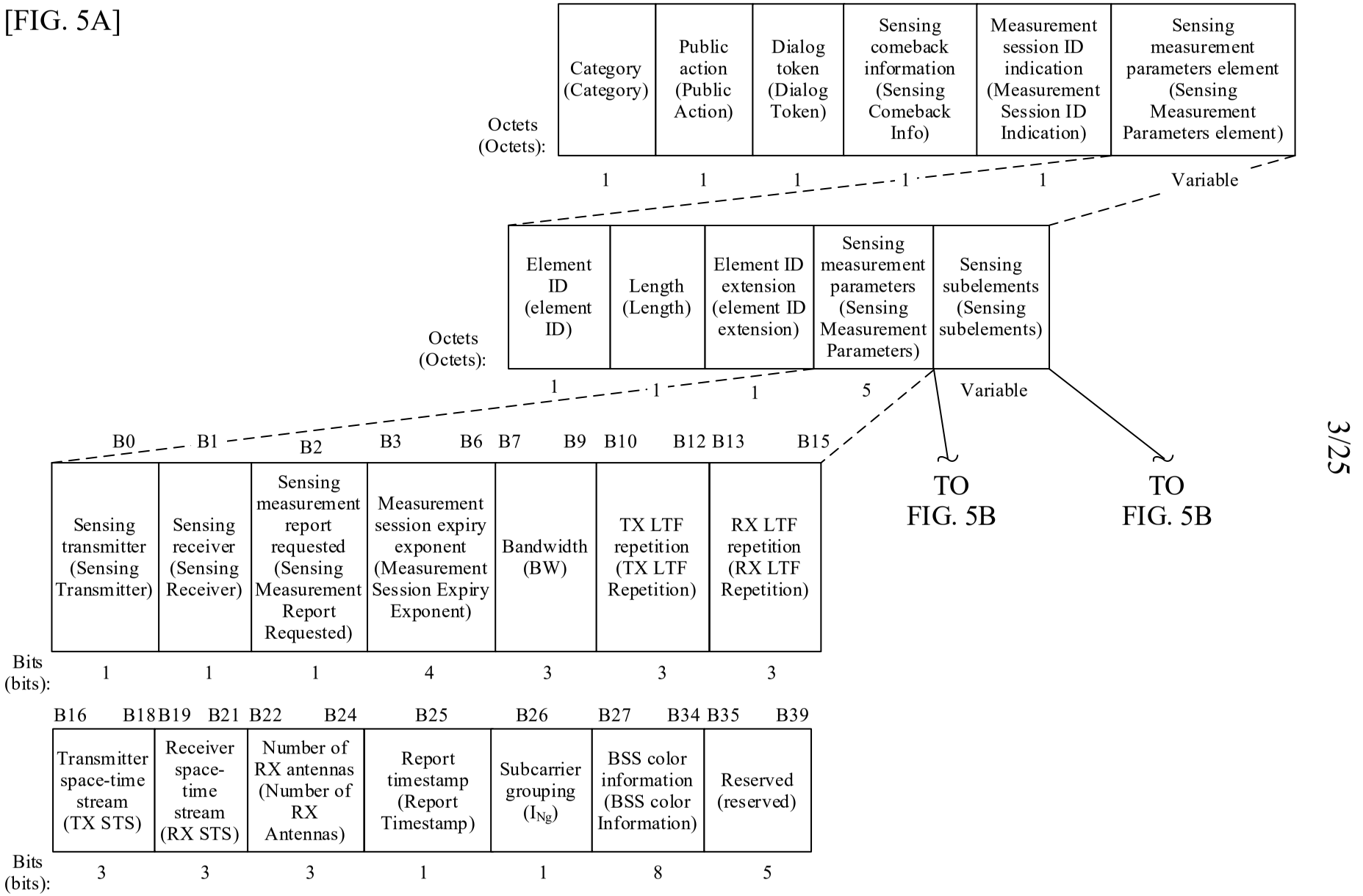

[FIG. 3]



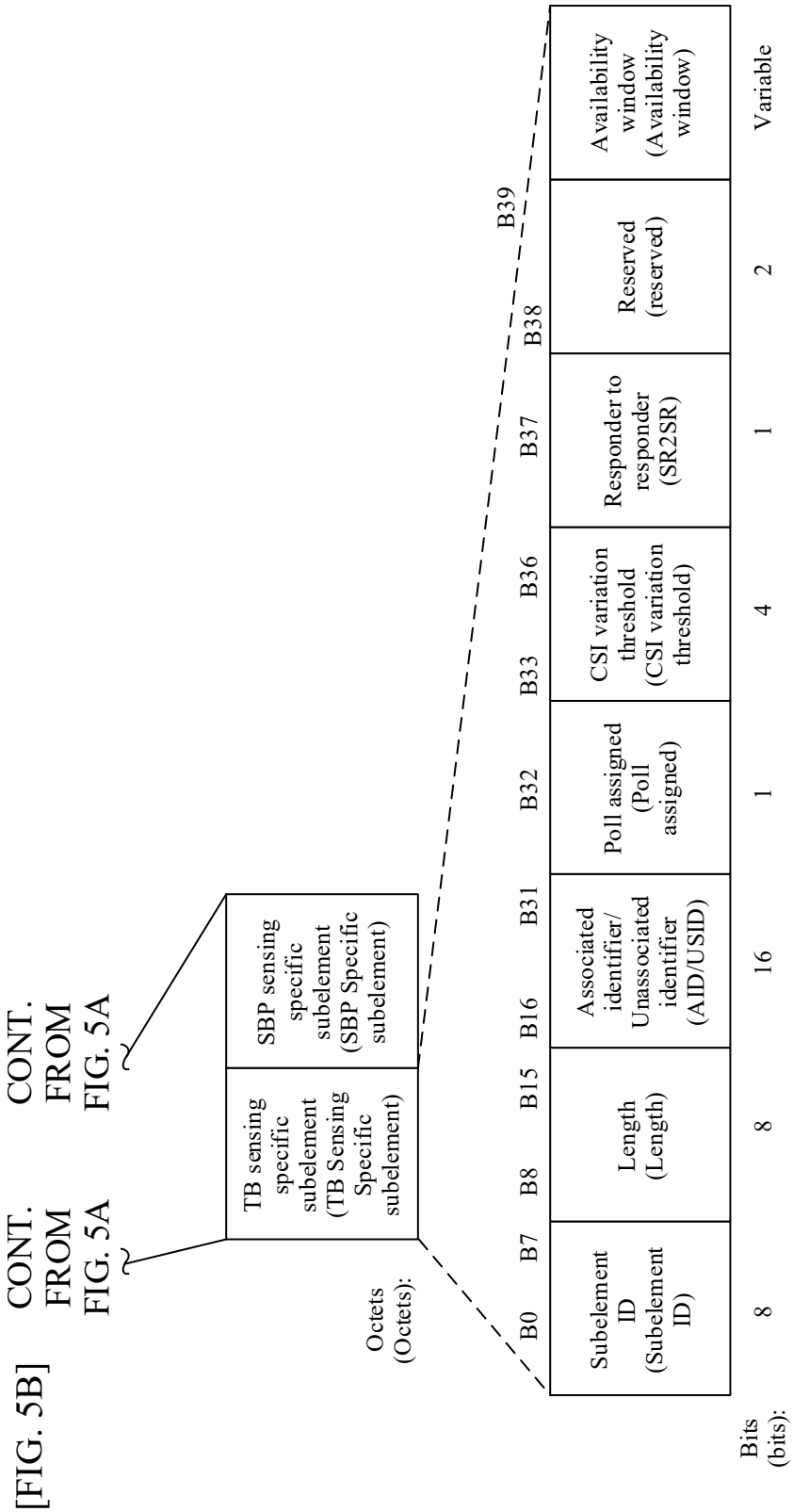
[FIG. 4]


Octets (Octets):
Category (Category)
Public action (Public Action)
Dialog token (Dialog Token)
SBP parameters element (SBP Parameters element)
Sensing measurement parameters element (Sensing Measurement Parameters element)
ISTA availability window element (ISTA Availability Window element)
1
1
1
Variable (variable)
Variable (variable)
Variable (variable)
Octets (Octets):
Element ID (element ID)
Length (Length)
Element ID extension (Element ID Extension)
SBP parameters control (SBP Parameters Control)
Sensing responder addresses (Sensing Responder Addresses)
Sensing responder identifiers (Sensing Responder IDs)
Sensing responder role bitmap (Sensing Responder Role Bitmap)
1
1
1
1
0 or n*6
0 or variable
0 or variable
Bits (Bits):
SBP request (SBP Request)
SBP procedure expiry exponent (SBP Procedure Expiry Exponent)
Sensing responder (Sensing Responder)
Number of sensing responders (Number Of Sensing Responders)
Mandatory number of responders (Mandatory Number Of Responders)
Preferred responder list (Preferred Responder List)
Number of preferred responders (Number Of Preferred Responders)
Mandatory preferred responder (Mandatory Preferred Responder)
Preferred responder role bitmap present (Preferred Responder Role Bitmap Present)
Reserved (Reserved)
1
4
1
4
1
1
4
1
1
5

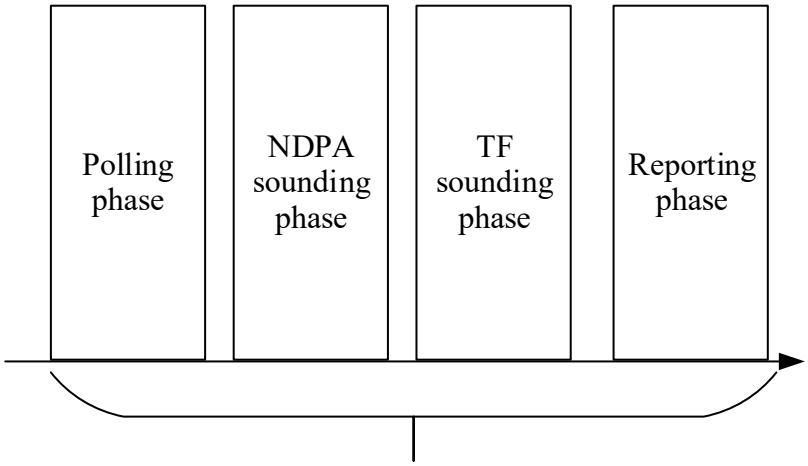
[FIG. 5A]


Octets (Octets):
Category (Category)
Public action (Public Action)
Dialog token (Dialog Token)
Sensing comeback information (Sensing Comeback Info)
Measurement session ID indication (Measurement Session ID Indication)
Sensing measurement parameters element (Sensing Measurement Parameters element)
1
1
1
1
1
Variable
Octets (Octets):
Element ID (element ID)
Length (Length)
Element ID extension (element ID extension)
Sensing measurement parameters (Sensing Measurement Parameters)
Sensing subelements (Sensing subelements)
1
1
1
5
Variable
TO FIG. 5B
TO FIG. 5B
B0 B1 B2 B3 B6 B7 B9 B10 B12 B13 B15
Sensing transmitter (Sensing Transmitter)
Sensing receiver (Sensing Receiver)
Sensing measurement report requested (Sensing Measurement Report Requested)
Measurement session expiry exponent (Measurement Session Expiry Exponent)
Bandwidth (BW)
TX LTF repetition (TX LTF Repetition)
RX LTF repetition (RX LTF Repetition)
Bits (bits):
1
1
1
4
3
3
3
B16 B18 B19 B21 B22 B24 B25 B26 B27 B34 B35 B39
Transmitter space-time stream (TX STS)
Receiver space-time stream (RX STS)
Number of RX antennas (Number of RX Antennas)
Report timestamp (Report Timestamp)
Subcarrier grouping ($I_{Ng}$)
BSS color information (BSS color Information)
Reserved (reserved)
Bits (bits):
3
3
3
1
1
8
5

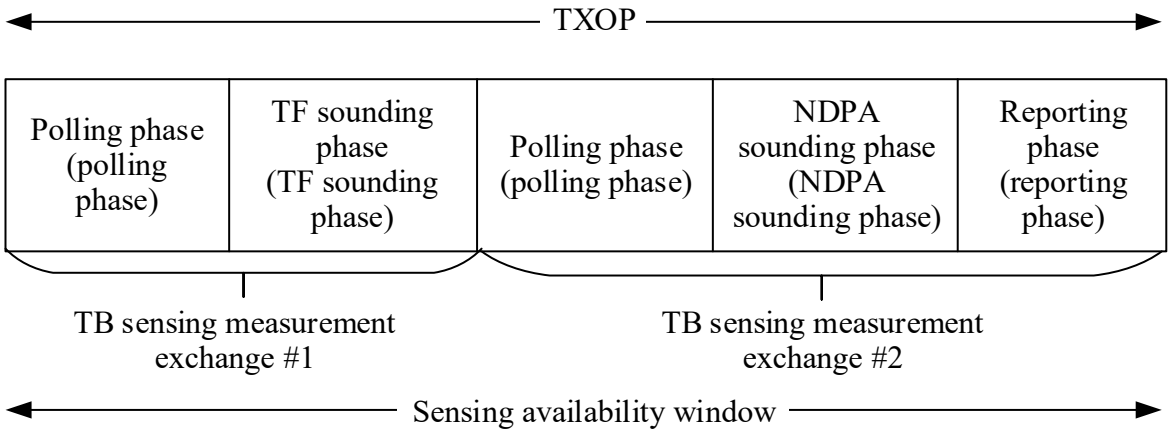
[FIG. 5B]


CONT. FROM FIG. 5A
CONT. FROM FIG. 5A
Subelement ID (Subelement ID)
Length (Length)
TB sensing specific subelement (TB Sensing Specific subelement)
SBP sensing specific subelement (SBP Specific subelement)
Associated identifier/ Unassociated identifier (AID/USID)
Poll assigned (Poll assigned)
CSI variation threshold (CSI variation threshold)
Responder to responder (SR2SR)
Reserved (reserved)
Availability window (Availability window)
Octets (Octets):
Bits (bits):
B0
B7
B8
B15
B16
B31
B32
B33
B36
B37
B38
B39
8
8
16
1
4
1
2
Variable

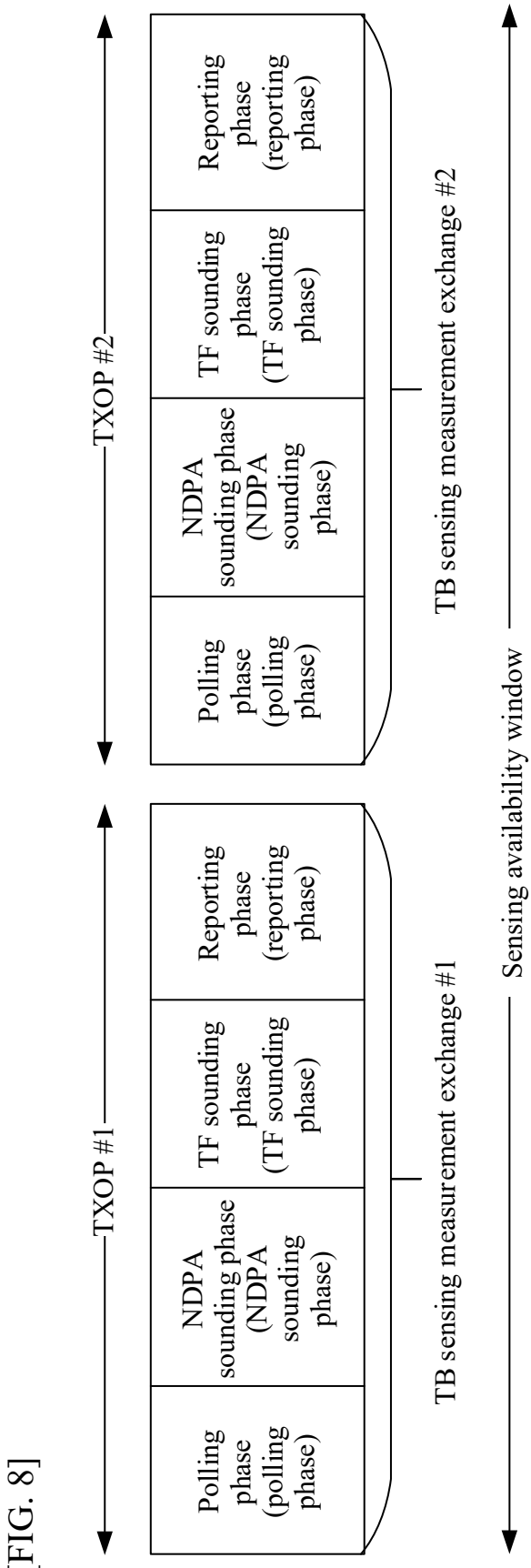
[FIG. 6]


Polling phase
NDPA sounding phase
TF sounding phase
Reporting phase
Trigger-based sensing measurement exchange

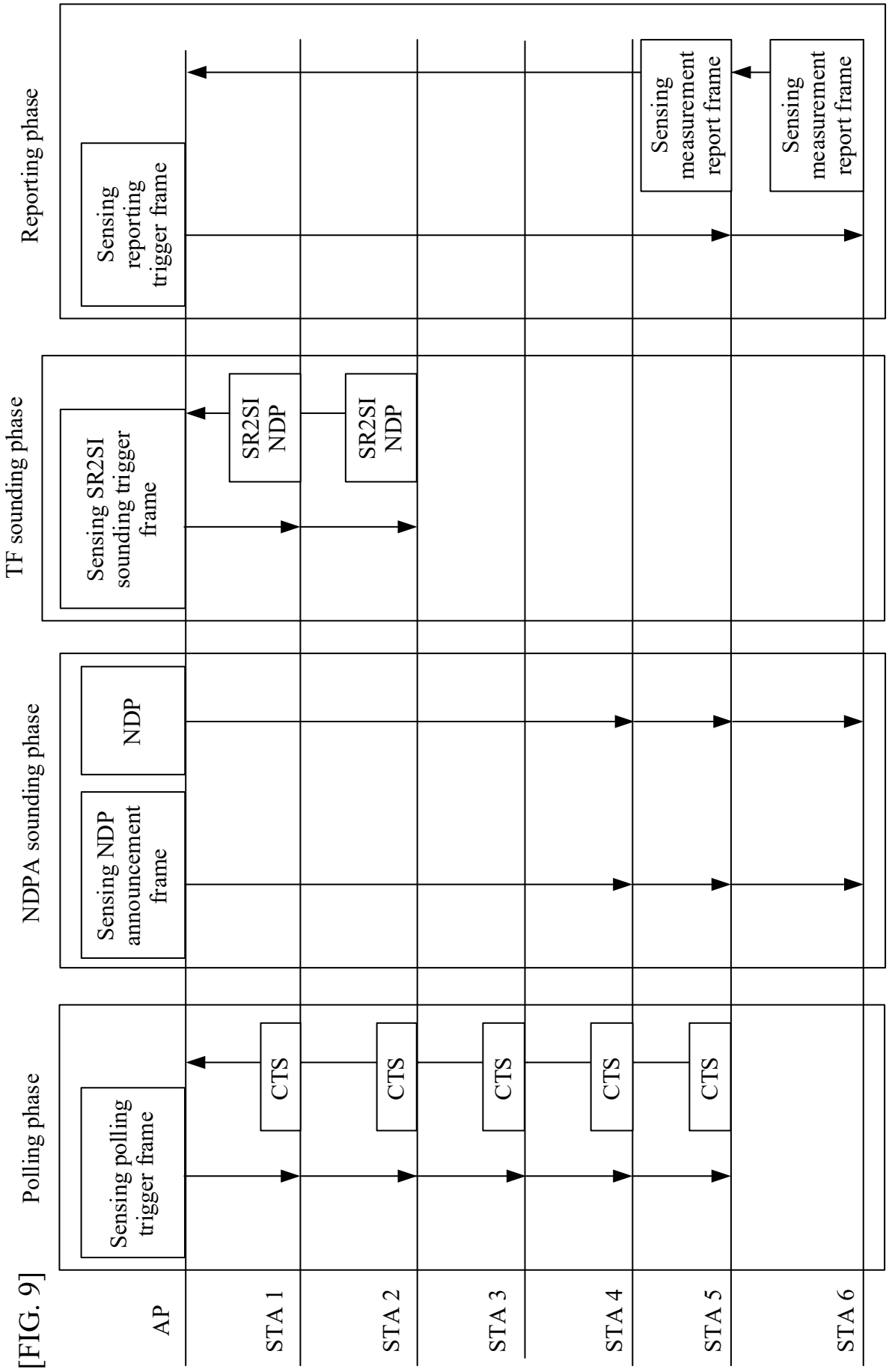
[FIG. 7]


TXOP
Polling phase (polling phase)
TF sounding phase (TF sounding phase)
Polling phase (polling phase)
NDPA sounding phase (NDPA sounding phase)
Reporting phase (reporting phase)
TB sensing measurement exchange #1
TB sensing measurement exchange #2
Sensing availability window

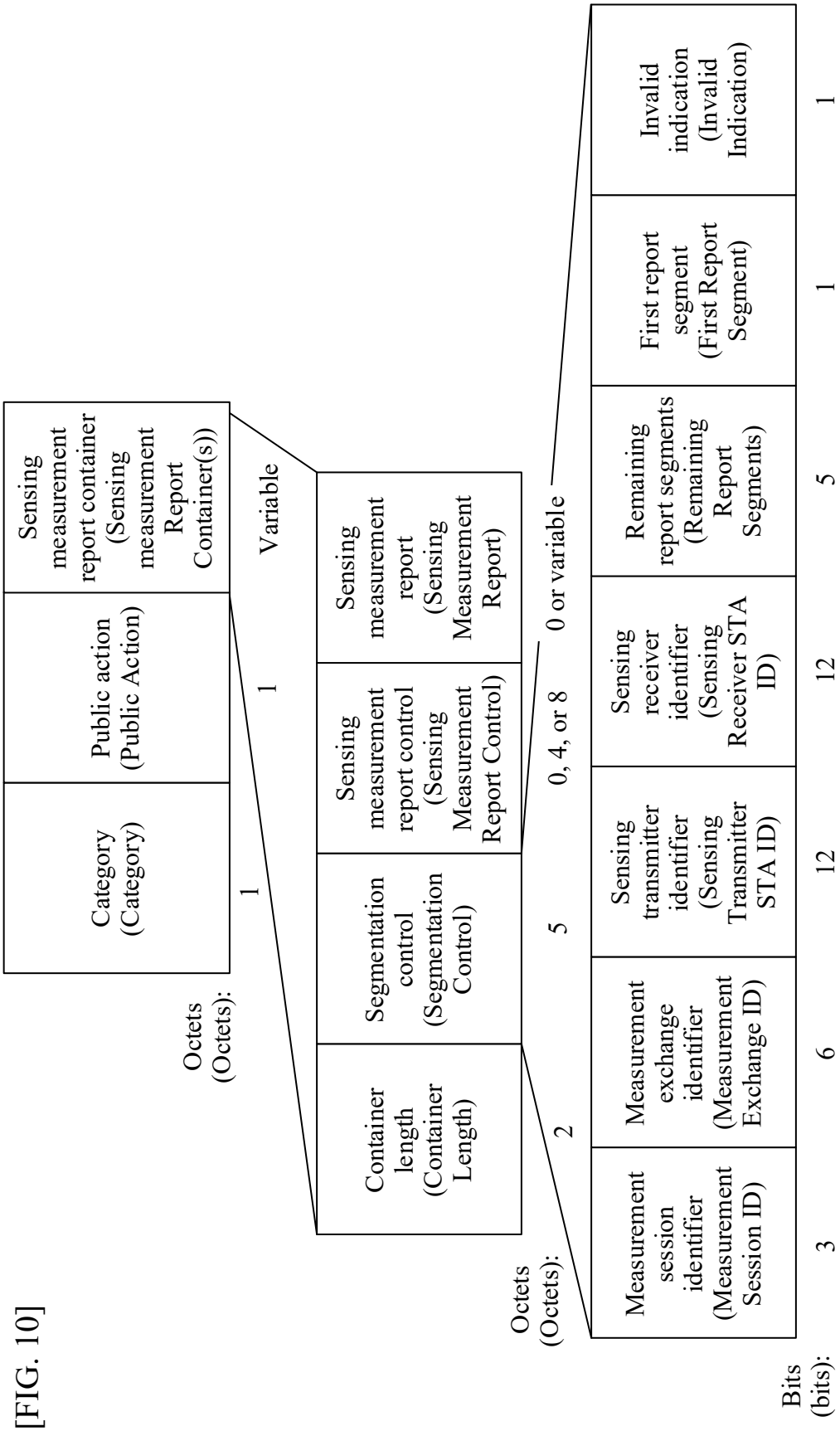
[FIG. 8]


TXOP #1
TXOP #2
Polling phase (polling phase)
NDPA sounding phase (NDPA sounding phase)
TF sounding phase (TF sounding phase)
Reporting phase (reporting phase)
TB sensing measurement exchange #1
TB sensing measurement exchange #2
Sensing availability window

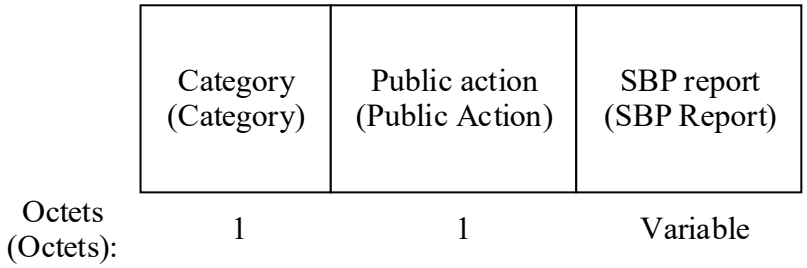
[FIG. 9]


Polling phase
NDPA sounding phase
TF sounding phase
Reporting phase
Sensing polling trigger frame
Sensing NDP announcement frame
NDP
Sensing SR2SI sounding trigger frame
SR2SI NDP
SR2SI NDP
Sensing reporting trigger frame
Sensing measurement report frame
Sensing measurement report frame
CTS
CTS
CTS
CTS
CTS
AP
STA 1
STA 2
STA 3
STA 4
STA 5
STA 6

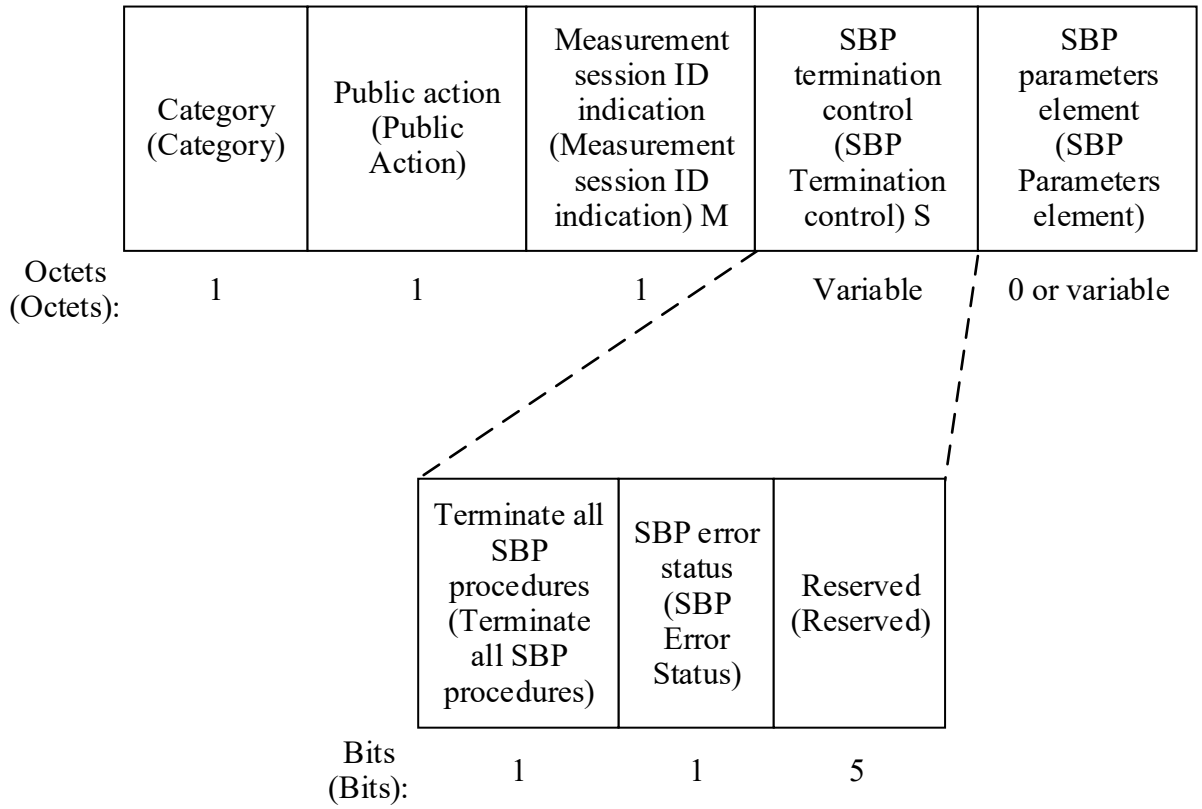
[FIG. 10]


Category (Category)
Public action (Public Action)
Sensing measurement report container (Sensing measurement Report Container(s))
Octets (Octets):
1
1
Variable
Container length (Container Length)
Segmentation control (Segmentation Control)
Sensing measurement report control (Sensing Measurement Report Control)
Sensing measurement report (Sensing Measurement Report)
Octets (Octets):
2
5
0, 4, or 8
0 or variable
Measurement session identifier (Measurement Session ID)
Measurement exchange identifier (Measurement Exchange ID)
Sensing transmitter identifier (Sensing Transmitter STA ID)
Sensing receiver identifier (Sensing Receiver STA ID)
Remaining report segments (Remaining Report Segments)
First report segment (First Report Segment)
Invalid indication (Invalid Indication)
Bits (bits):
3
6
12
12
5
1
1

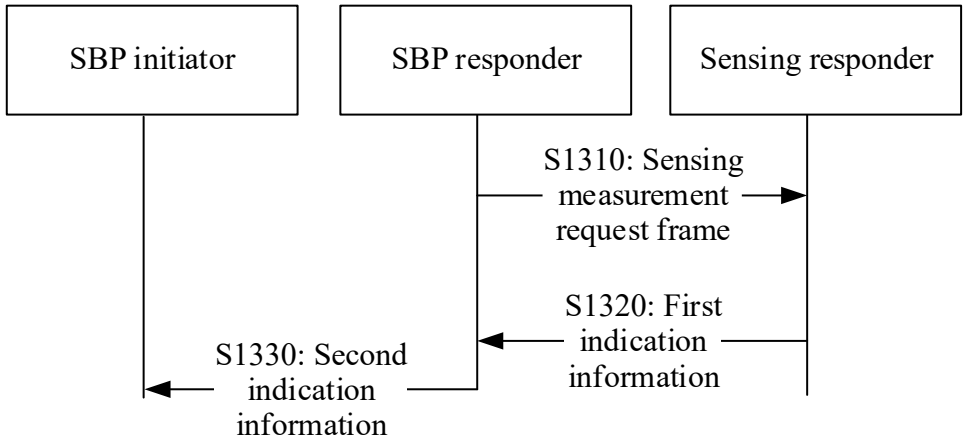
[FIG. 11]


Category (Category)
Public action (Public Action)
SBP report (SBP Report)
Octets (Octets):
1
1
Variable

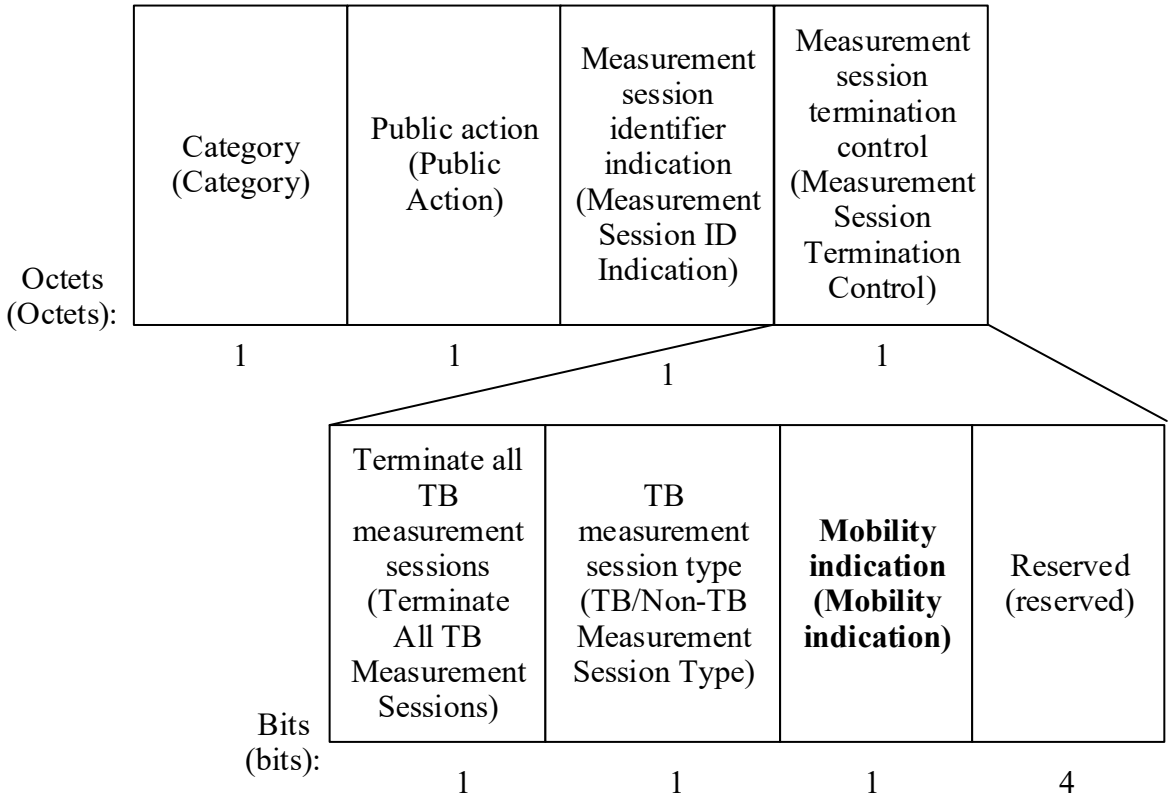
[FIG. 12]


Category (Category)
Public action (Public Action)
Measurement session ID indication (Measurement session ID indication) M
SBP termination control (SBP Termination control) S
SBP parameters element (SBP Parameters element)
Octets (Octets):
1
1
1
Variable
0 or variable
Terminate all SBP procedures (Terminate all SBP procedures)
SBP error status (SBP Error Status)
Reserved (Reserved)
Bits (Bits):
1
1
5

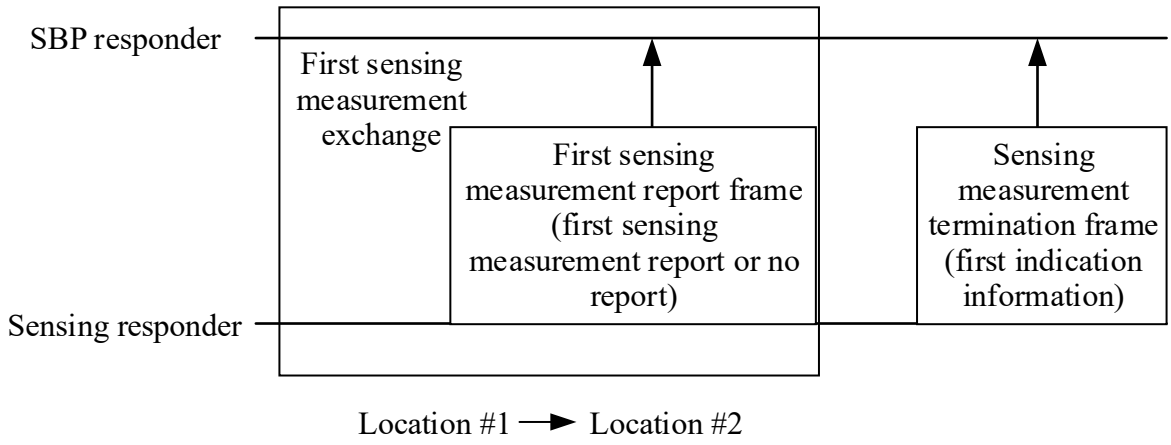
[FIG. 13]


SBP initiator
SBP responder
Sensing responder
S1310: Sensing measurement request frame
S1320: First indication information
S1330: Second indication information

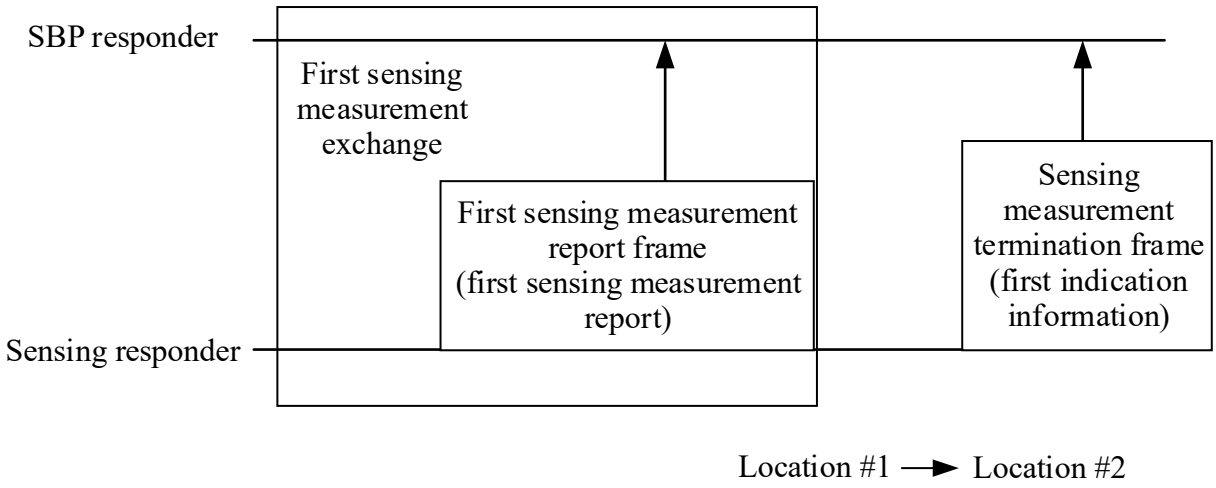
[FIG. 14]


Category (Category)
Public action (Public Action)
Measurement session identifier indication (Measurement Session ID Indication)
Measurement session termination control (Measurement Session Termination Control)
Octets (Octets):
1
1
1
1
Terminate all TB measurement sessions (Terminate All TB Measurement Sessions)
TB measurement session type (TB/Non-TB Measurement Session Type)
Mobility indication (Mobility indication)
Reserved (reserved)
Bits (bits):
1
1
1
4

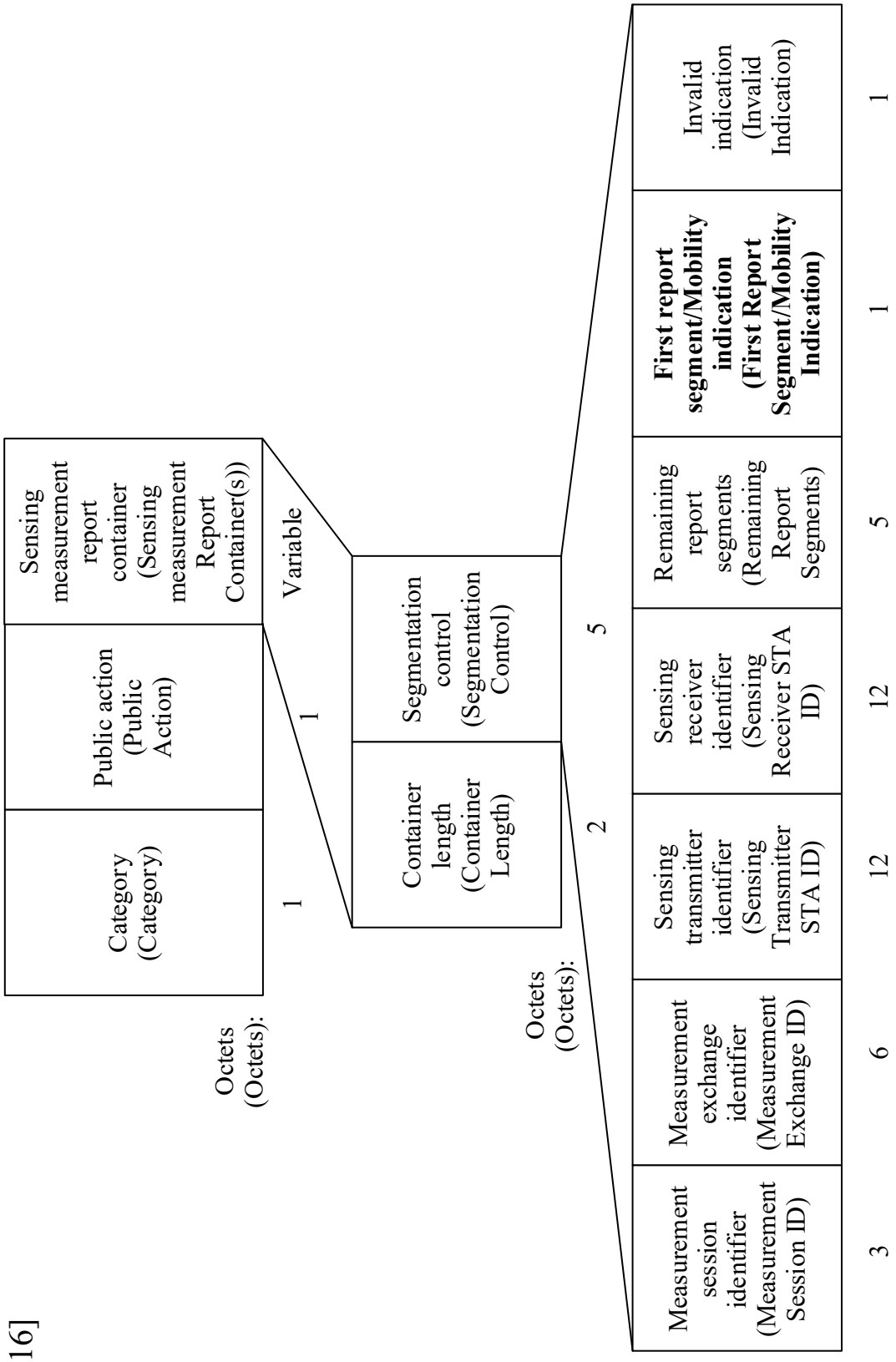
[FIG. 15A]



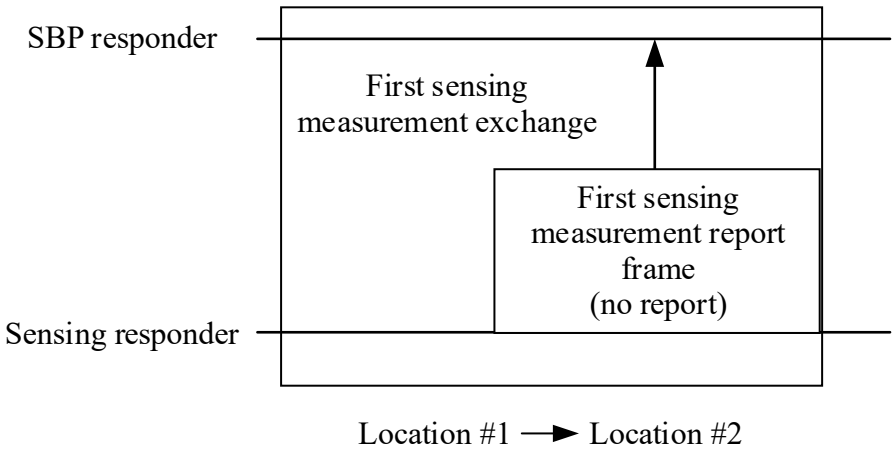

[FIG. 15B]



[FIG. 16]


Category (Category)
Public action (Public Action)
Sensing measurement report container (Sensing measurement Report Container(s))
Octets (Octets):
1
1
Variable
Container length (Container Length)
Segmentation control (Segmentation Control)
Octets (Octets):
2
5
Measurement session identifier (Measurement Session ID)
Measurement exchange identifier (Measurement Exchange ID)
Sensing transmitter identifier (Sensing Transmitter STA ID)
Sensing receiver identifier (Sensing Receiver STA ID)
Remaining report segments (Remaining Report Segments)
First report segment/Mobility indication (First Report Segment/Mobility Indication)
Invalid indication (Invalid Indication)
Bits (bits):
3
6
12
12
5
1
1

[FIG. 17]

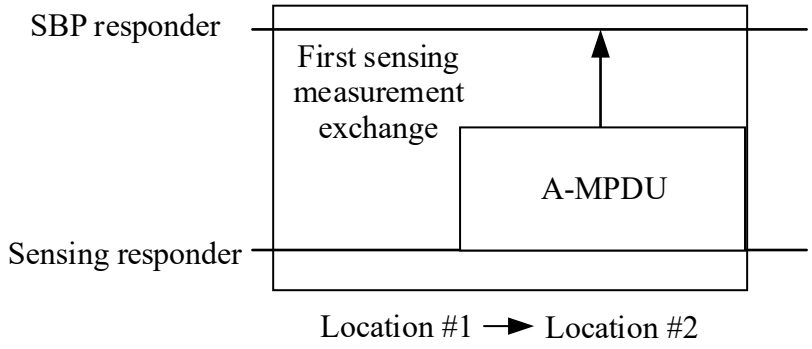



[FIG. 18]

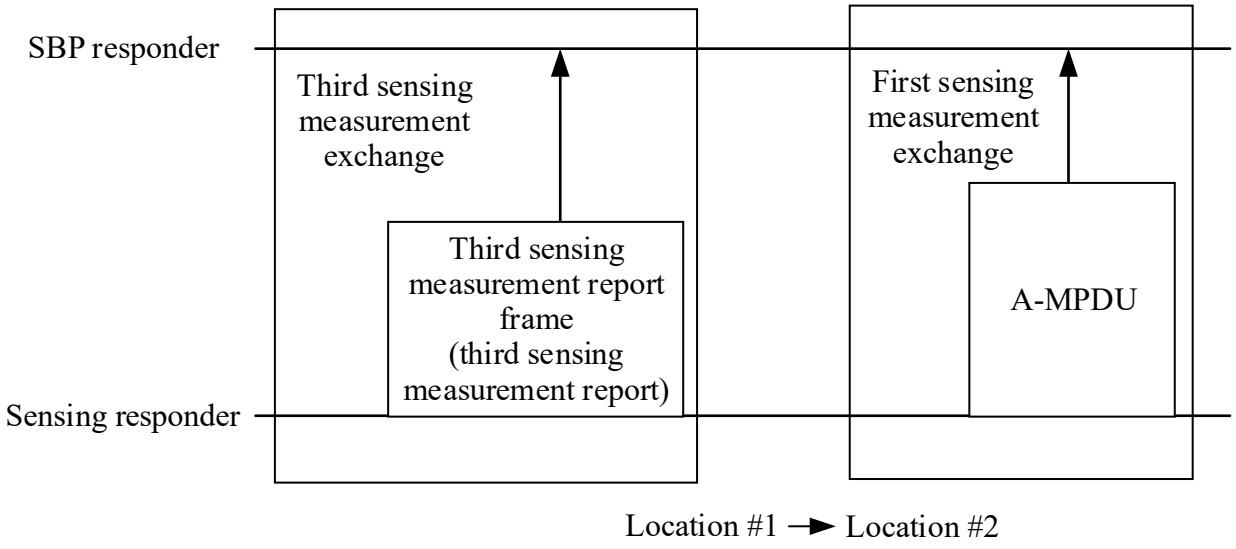
| Category (Category) | Public action (Public Action) | **Mobility indication (Mobility indication)** |
|---|---|---|
| 1 | 1 | 1 |

Octets (Octets):

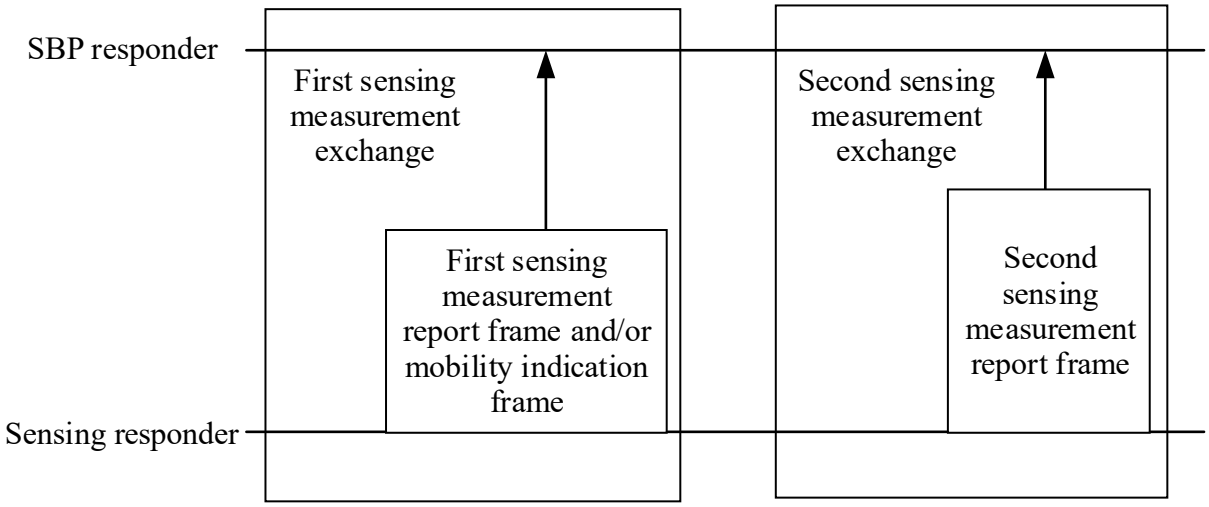
[FIG. 19A]



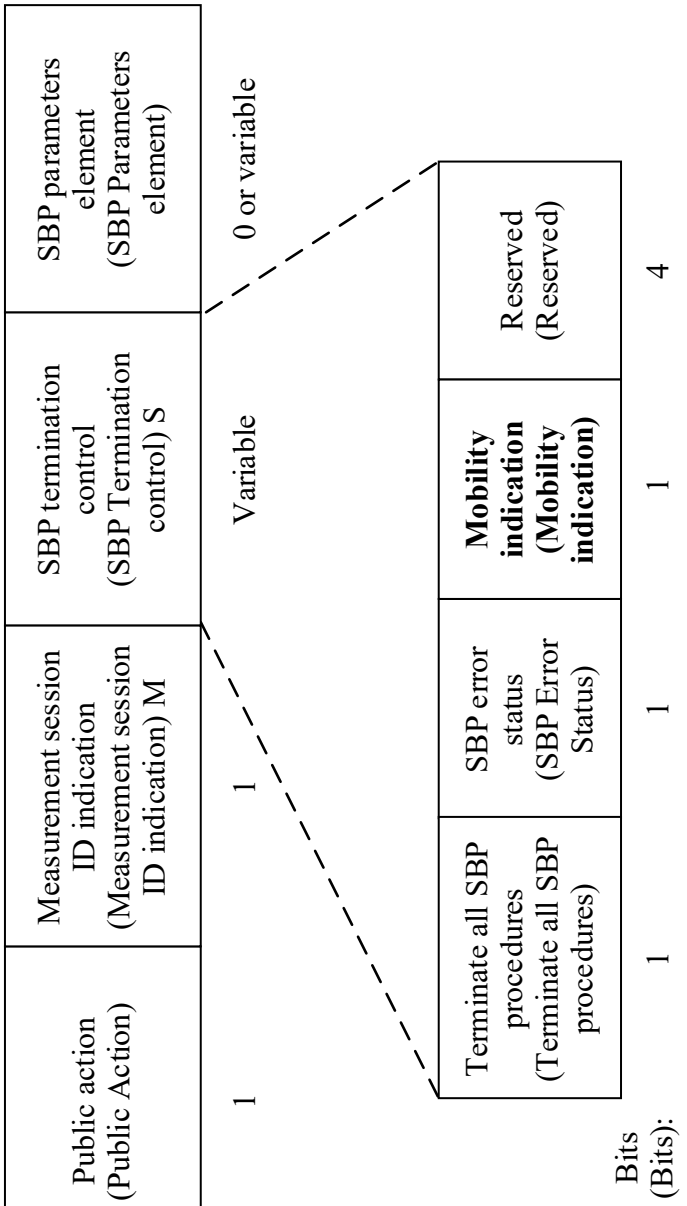

[FIG. 19B]



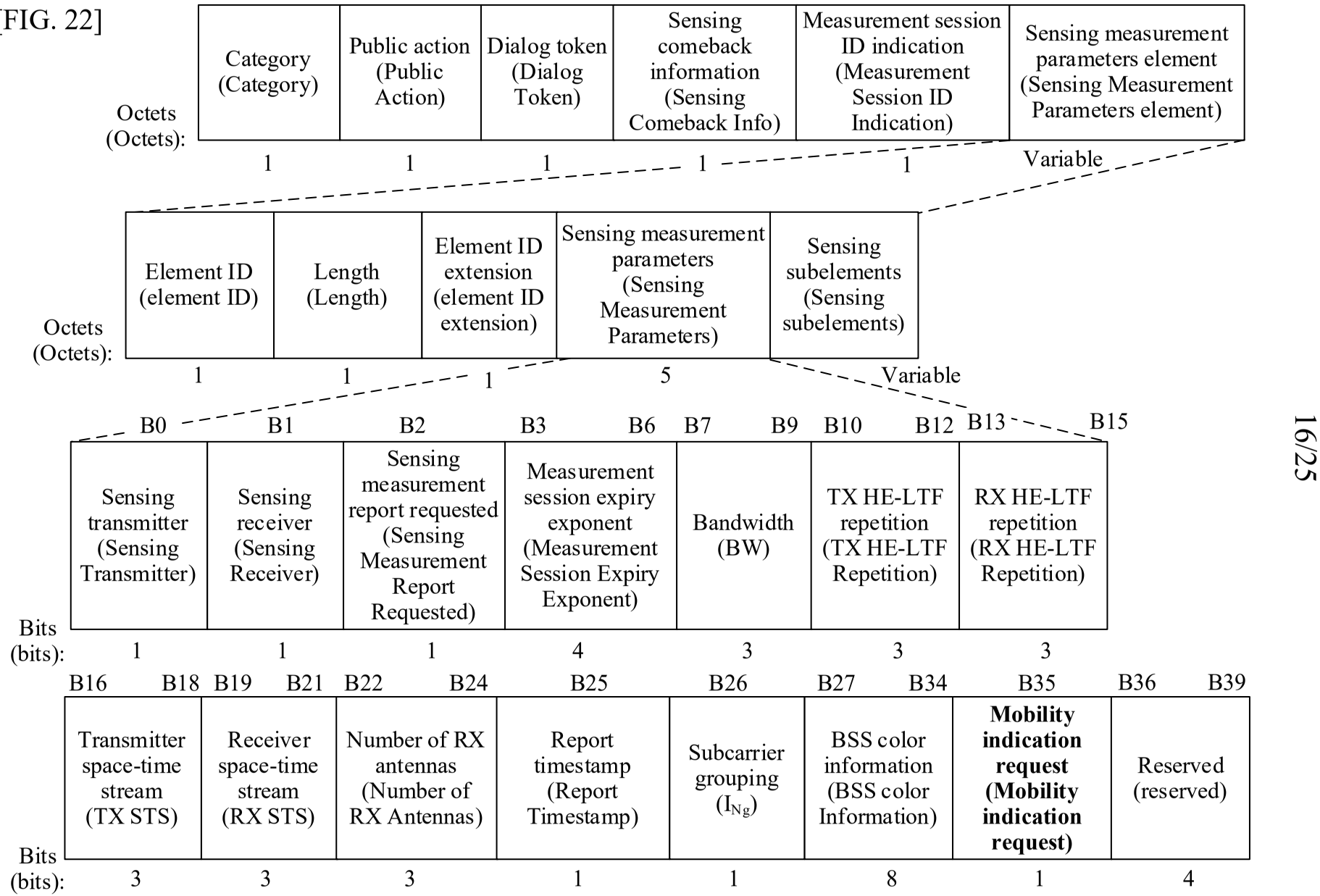

[FIG. 20]



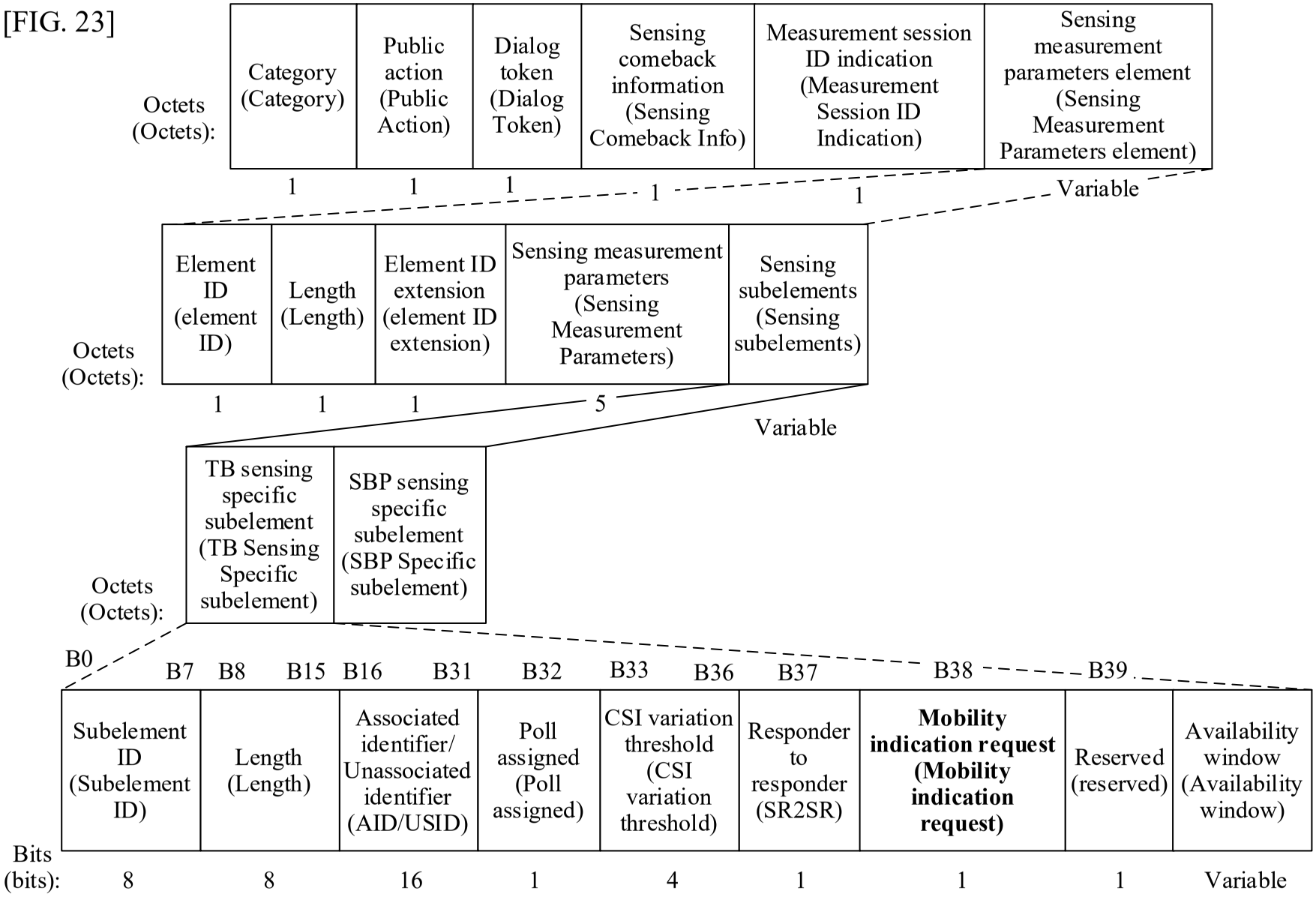
[FIG. 21]


Category (Category)
Public action (Public Action)
Measurement session ID indication (Measurement session ID indication) M
SBP termination control (SBP Termination control) S
SBP parameters element (SBP Parameters element)
Octets (Octets):
1
1
1
Variable
0 or variable
Terminate all SBP procedures (Terminate all SBP procedures)
SBP error status (SBP Error Status)
Mobility indication (Mobility indication)
Reserved (Reserved)
Bits (Bits):
1
1
1
4

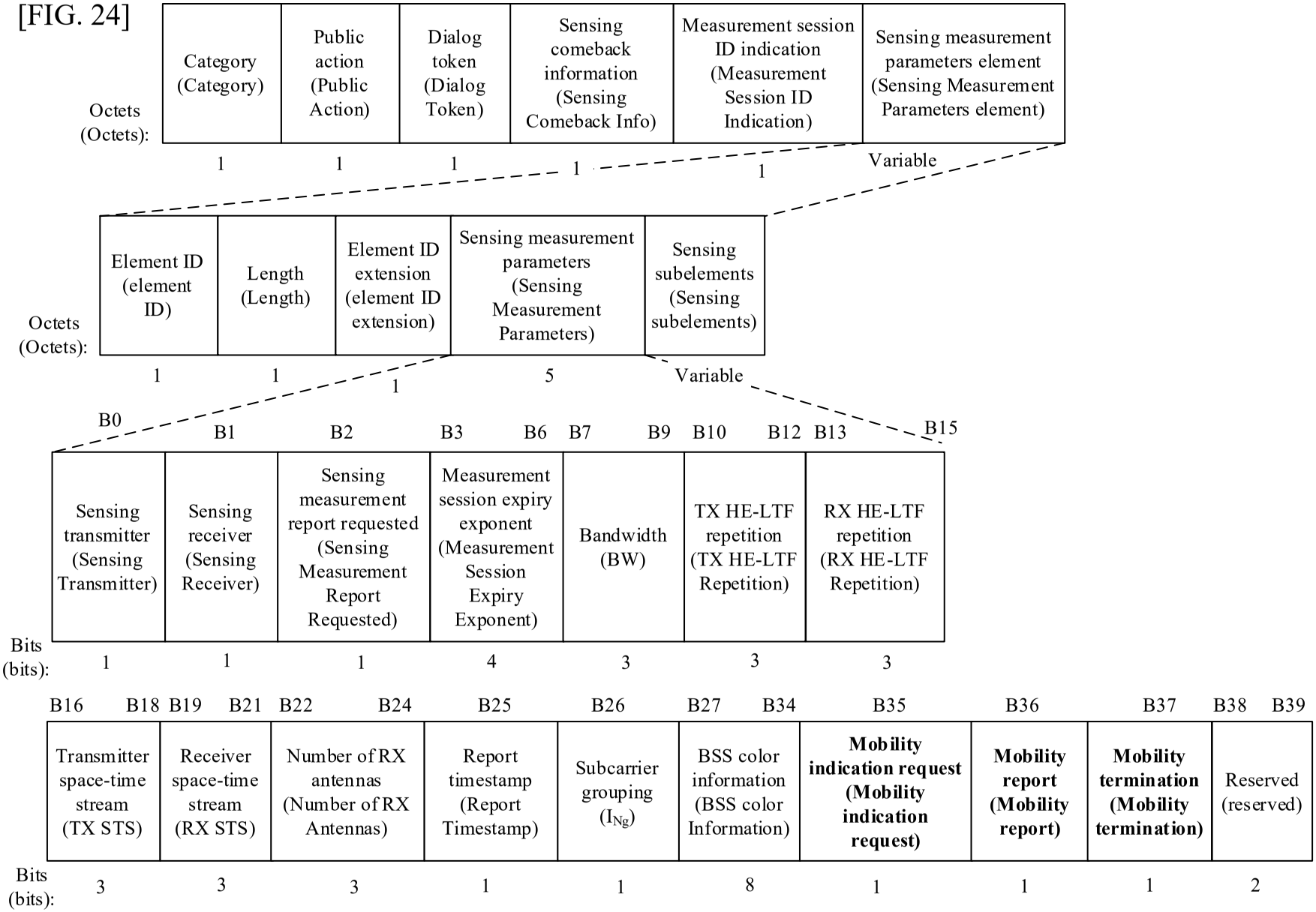
[FIG. 22]


Category (Category)
Public action (Public Action)
Dialog token (Dialog Token)
Sensing comeback information (Sensing Comeback Info)
Measurement session ID indication (Measurement Session ID Indication)
Sensing measurement parameters element (Sensing Measurement Parameters element)
Octets (Octets):
1
1
1
1
1
Variable
Element ID (element ID)
Length (Length)
Element ID extension (element ID extension)
Sensing measurement parameters (Sensing Measurement Parameters)
Sensing subelements (Sensing subelements)
Octets (Octets):
1
1
1
5
Variable
B0
B1
B2
B3
B6
B7
B9
B10
B12
B13
B15
Sensing transmitter (Sensing Transmitter)
Sensing receiver (Sensing Receiver)
Sensing measurement report requested (Sensing Measurement Report Requested)
Measurement session expiry exponent (Measurement Session Expiry Exponent)
Bandwidth (BW)
TX HE-LTF repetition (TX HE-LTF Repetition)
RX HE-LTF repetition (RX HE-LTF Repetition)
Bits (bits):
1
1
1
4
3
3
3
B16
B18
B19
B21
B22
B24
B25
B26
B27
B34
B35
B36
B39
Transmitter space-time stream (TX STS)
Receiver space-time stream (RX STS)
Number of RX antennas (Number of RX Antennas)
Report timestamp (Report Timestamp)
Subcarrier grouping ($I_{Ng}$)
BSS color information (BSS color Information)
Mobility indication request (Mobility indication request)
Reserved (reserved)
Bits (bits):
3
3
3
1
1
8
1
4

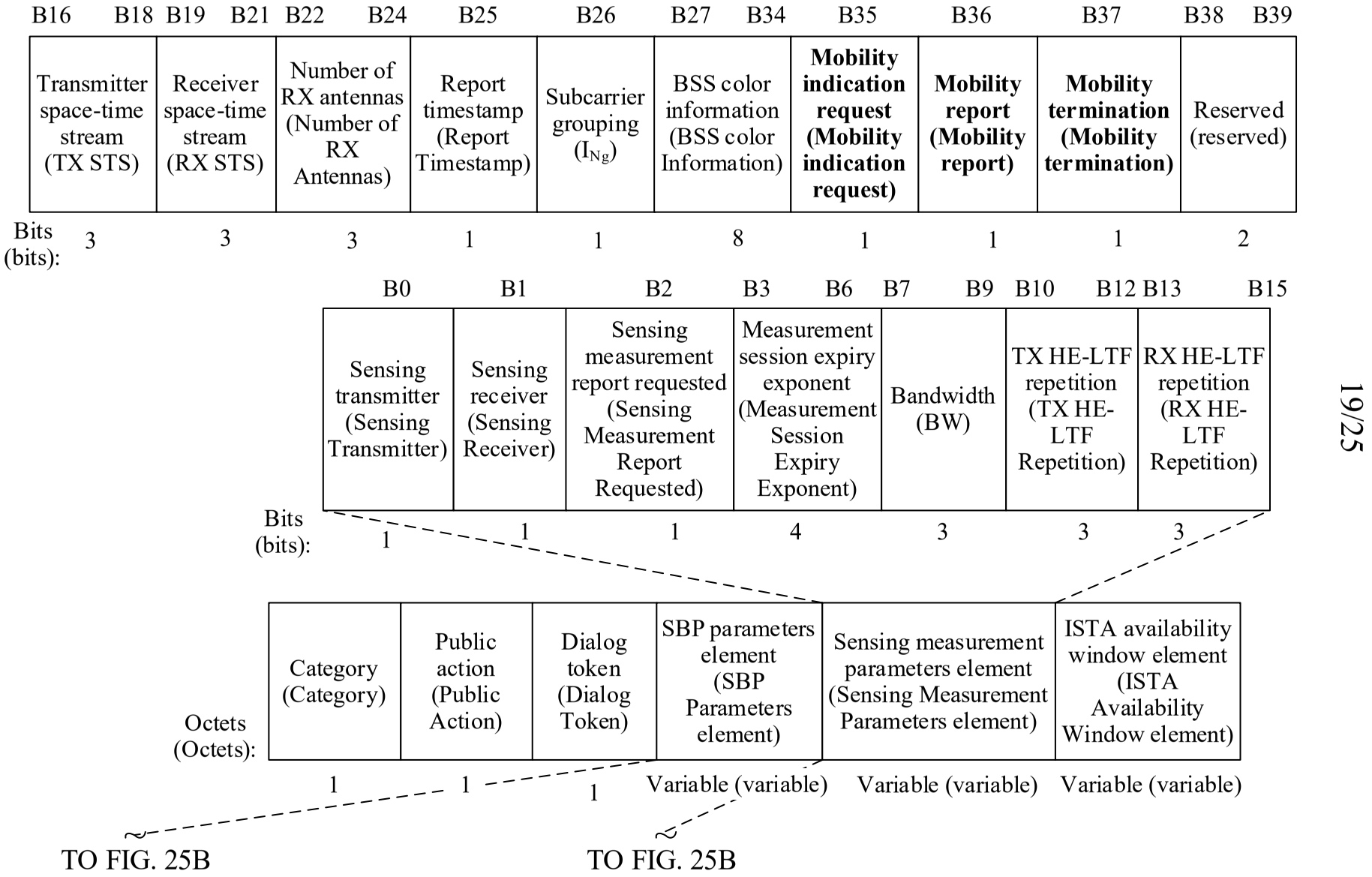
[FIG. 23]


Octets (Octets):
Category (Category)
Public action (Public Action)
Dialog token (Dialog Token)
Sensing comeback information (Sensing Comeback Info)
Measurement session ID indication (Measurement Session ID Indication)
Sensing measurement parameters element (Sensing Measurement Parameters element)
1
1
1
1
1
Variable
Octets (Octets):
Element ID (element ID)
Length (Length)
Element ID extension (element ID extension)
Sensing measurement parameters (Sensing Measurement Parameters)
Sensing subelements (Sensing subelements)
1
1
1
5
Variable
Octets (Octets):
TB sensing specific subelement (TB Sensing Specific subelement)
SBP sensing specific subelement (SBP Specific subelement)
B0
B7
B8
B15
B16
B31
B32
B33
B36
B37
B38
B39
Subelement ID (Subelement ID)
Length (Length)
Associated identifier/ Unassociated identifier (AID/USID)
Poll assigned (Poll assigned)
CSI variation threshold (CSI variation threshold)
Responder to responder (SR2SR)
Mobility indication request (Mobility indication request)
Reserved (reserved)
Availability window (Availability window)
Bits (bits):
8
8
16
1
4
1
1
1
Variable

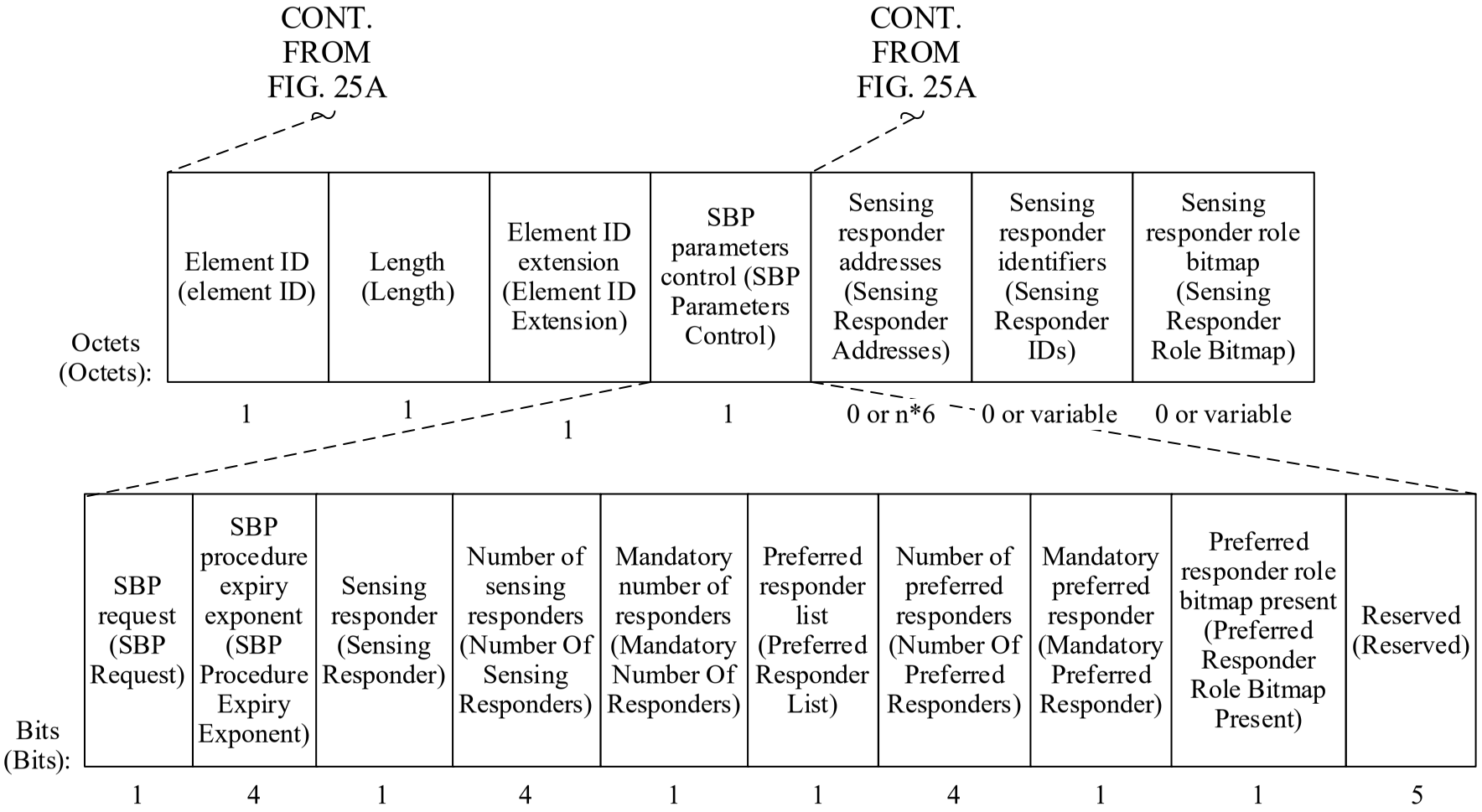
[FIG. 24]


Octets (Octets):
Category (Category)
Public action (Public Action)
Dialog token (Dialog Token)
Sensing comeback information (Sensing Comeback Info)
Measurement session ID indication (Measurement Session ID Indication)
Sensing measurement parameters element (Sensing Measurement Parameters element)
1
1
1
1
1
Variable
Octets (Octets):
Element ID (element ID)
Length (Length)
Element ID extension (element ID extension)
Sensing measurement parameters (Sensing Measurement Parameters)
Sensing subelements (Sensing subelements)
1
1
1
5
Variable
B0
B1
B2
B3
B6
B7
B9
B10
B12
B13
B15
Sensing transmitter (Sensing Transmitter)
Sensing receiver (Sensing Receiver)
Sensing measurement report requested (Sensing Measurement Report Requested)
Measurement session expiry exponent (Measurement Session Expiry Exponent)
Bandwidth (BW)
TX HE-LTF repetition (TX HE-LTF Repetition)
RX HE-LTF repetition (RX HE-LTF Repetition)
Bits (bits):
1
1
1
4
3
3
3
B16
B18
B19
B21
B22
B24
B25
B26
B27
B34
B35
B36
B37
B38
B39
Transmitter space-time stream (TX STS)
Receiver space-time stream (RX STS)
Number of RX antennas (Number of RX Antennas)
Report timestamp (Report Timestamp)
Subcarrier grouping ($I_{Ng}$)
BSS color information (BSS color Information)
**Mobility indication request (Mobility indication request)**
**Mobility report (Mobility report)**
**Mobility termination (Mobility termination)**
Reserved (reserved)
Bits (bits):
3
3
3
1
1
8
1
1
1
2

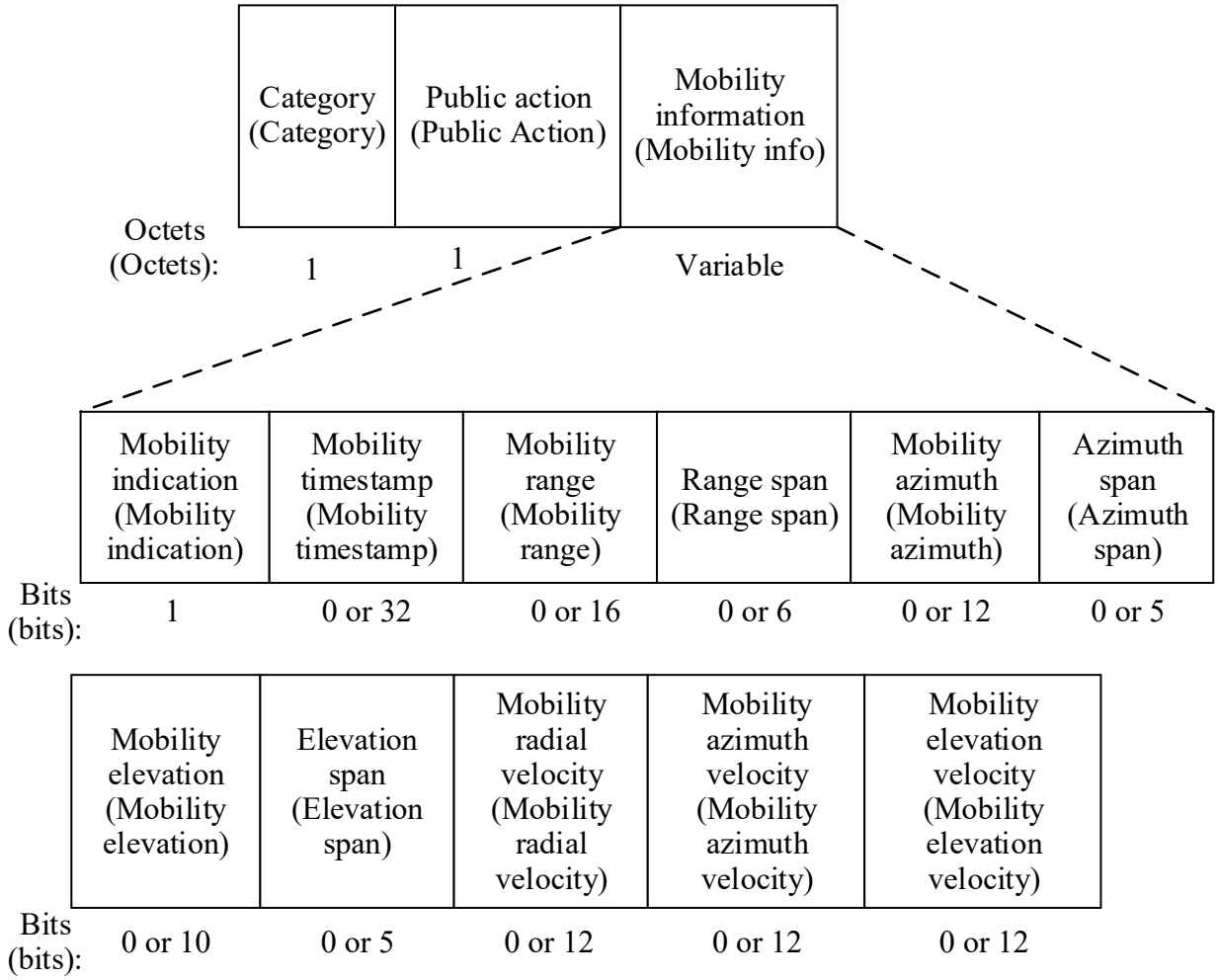
[FIG. 25A]


B16 B18 B19 B21 B22 B24 B25 B26 B27 B34 B35 B36 B37 B38 B39
Transmitter space-time stream (TX STS)
Receiver space-time stream (RX STS)
Number of RX antennas (Number of RX Antennas)
Report timestamp (Report Timestamp)
Subcarrier grouping ($I_{Ng}$)
BSS color information (BSS color Information)
Mobility indication request (Mobility indication request)
Mobility report (Mobility report)
Mobility termination (Mobility termination)
Reserved (reserved)
Bits (bits): 3 3 3 1 1 8 1 1 1 2
B0 B1 B2 B3 B6 B7 B9 B10 B12 B13 B15
Sensing transmitter (Sensing Transmitter)
Sensing receiver (Sensing Receiver)
Sensing measurement report requested (Sensing Measurement Report Requested)
Measurement session expiry exponent (Measurement Session Expiry Exponent)
Bandwidth (BW)
TX HE-LTF repetition (TX HE-LTF Repetition)
RX HE-LTF repetition (RX HE-LTF Repetition)
Bits (bits): 1 1 1 4 3 3 3
Octets (Octets):
Category (Category)
Public action (Public Action)
Dialog token (Dialog Token)
SBP parameters element (SBP Parameters element)
Sensing measurement parameters element (Sensing Measurement Parameters element)
ISTA availability window element (ISTA Availability Window element)
1 1 1 Variable (variable) Variable (variable) Variable (variable)
TO FIG. 25B
TO FIG. 25B

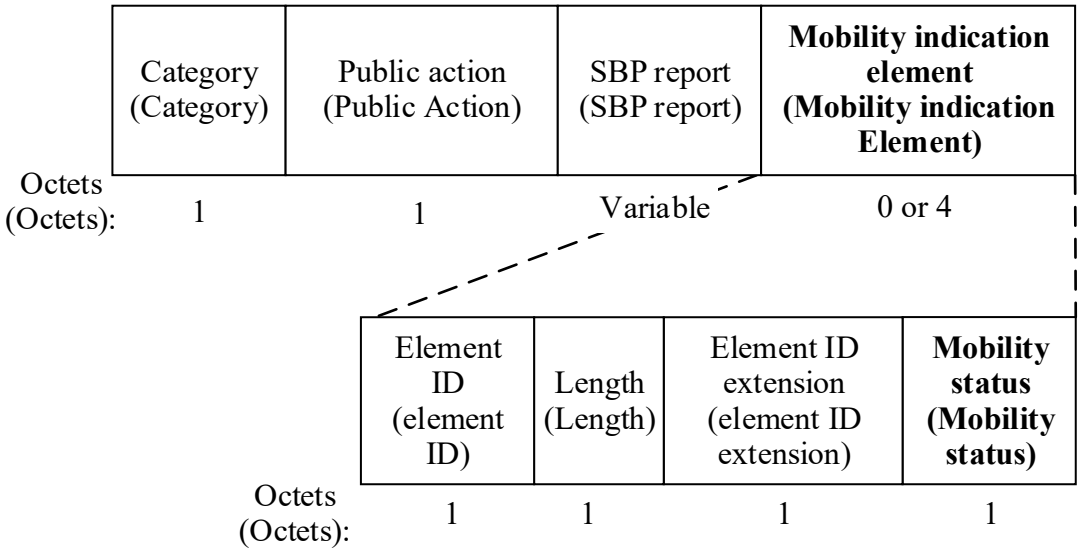
[FIG. 25B]


CONT. FROM FIG. 25A
CONT. FROM FIG. 25A
Element ID (element ID)
Length (Length)
Element ID extension (Element ID Extension)
SBP parameters control (SBP Parameters Control)
Sensing responder addresses (Sensing Responder Addresses)
Sensing responder identifiers (Sensing Responder IDs)
Sensing responder role bitmap (Sensing Responder Role Bitmap)
Octets (Octets):
1
1
1
1
0 or n*6
0 or variable
0 or variable
SBP request (SBP Request)
SBP procedure expiry exponent (SBP Procedure Expiry Exponent)
Sensing responder (Sensing Responder)
Number of sensing responders (Number Of Sensing Responders)
Mandatory number of responders (Mandatory Number Of Responders)
Preferred responder list (Preferred Responder List)
Number of preferred responders (Number Of Preferred Responders)
Mandatory preferred responder (Mandatory Preferred Responder)
Preferred responder role bitmap present (Preferred Responder Role Bitmap Present)
Reserved (Reserved)
Bits (Bits):
1
4
1
4
1
1
4
1
1
5

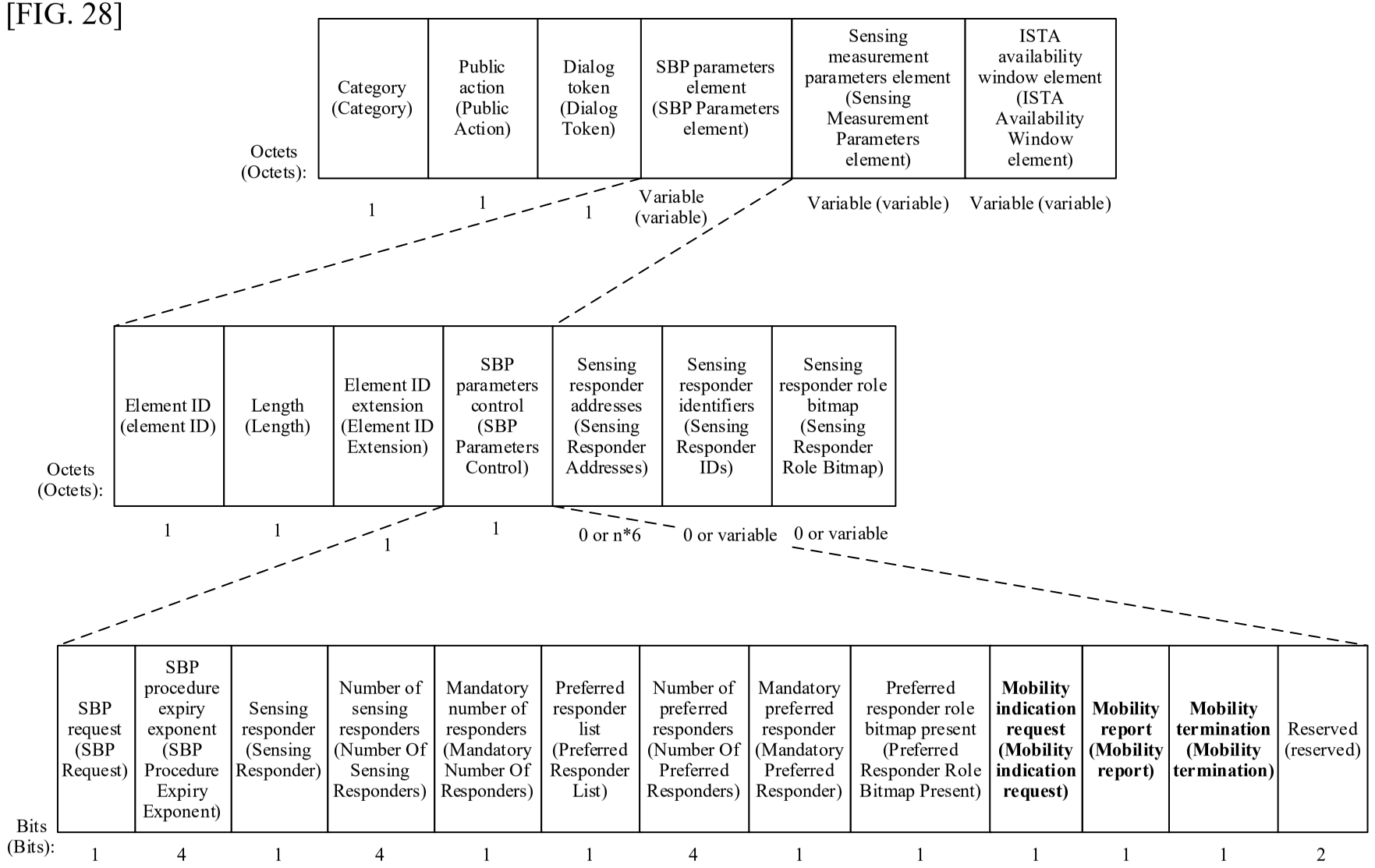
[FIG. 26]


Category (Category)
Public action (Public Action)
Mobility information (Mobility info)
Octets (Octets):
1
1
Variable
Mobility indication (Mobility indication)
Mobility timestamp (Mobility timestamp)
Mobility range (Mobility range)
Range span (Range span)
Mobility azimuth (Mobility azimuth)
Azimuth span (Azimuth span)
Bits (bits):
1
0 or 32
0 or 16
0 or 6
0 or 12
0 or 5
Mobility elevation (Mobility elevation)
Elevation span (Elevation span)
Mobility radial velocity (Mobility radial velocity)
Mobility azimuth velocity (Mobility azimuth velocity)
Mobility elevation velocity (Mobility elevation velocity)
Bits (bits):
0 or 10
0 or 5
0 or 12
0 or 12
0 or 12

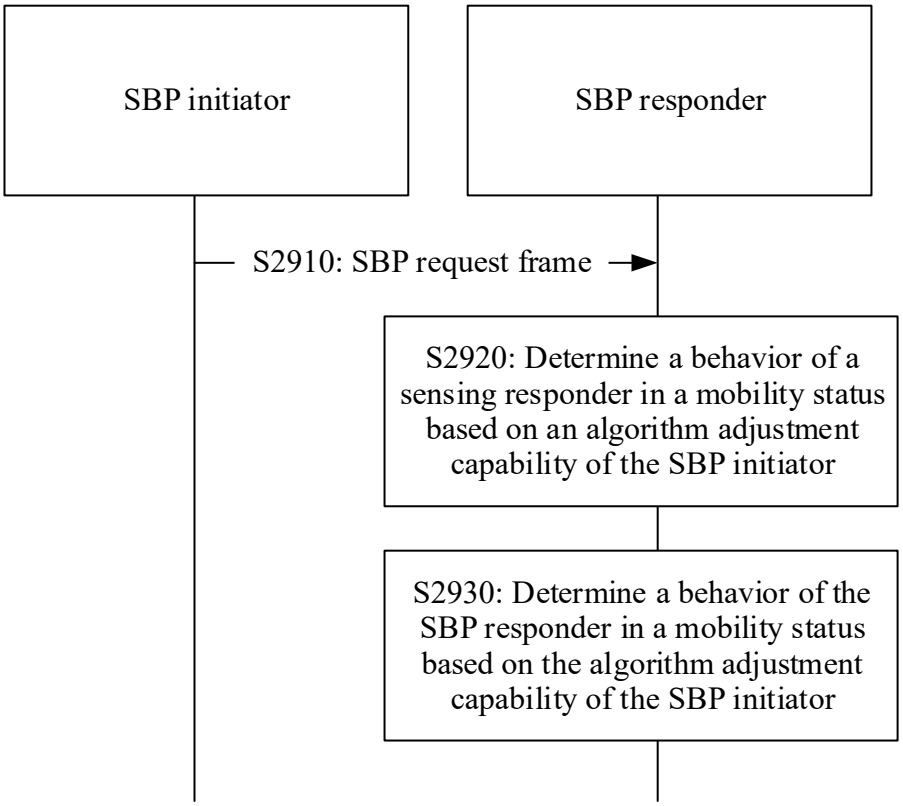
[FIG. 27]


Category (Category)
Public action (Public Action)
SBP report (SBP report)
**Mobility indication element (Mobility indication Element)**
Octets (Octets):
1
1
Variable
0 or 4
Element ID (element ID)
Length (Length)
Element ID extension (element ID extension)
**Mobility status (Mobility status)**
Octets (Octets):
1
1
1
1

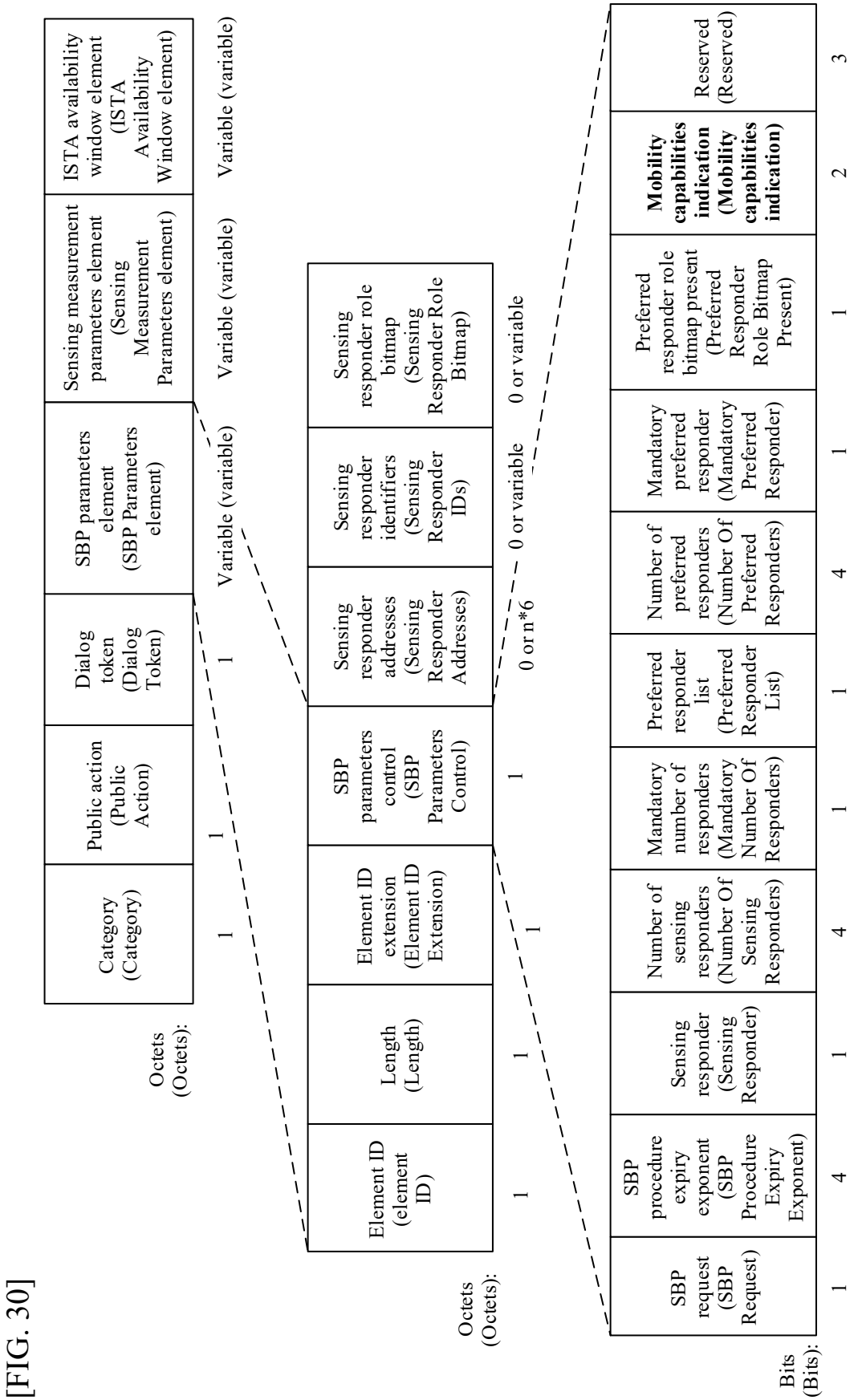
[FIG. 28]


Octets (Octets):
Category (Category)
Public action (Public Action)
Dialog token (Dialog Token)
SBP parameters element (SBP Parameters element)
Sensing measurement parameters element (Sensing Measurement Parameters element)
ISTA availability window element (ISTA Availability Window element)
1
1
1
Variable (variable)
Variable (variable)
Variable (variable)
Octets (Octets):
Element ID (element ID)
Length (Length)
Element ID extension (Element ID Extension)
SBP parameters control (SBP Parameters Control)
Sensing responder addresses (Sensing Responder Addresses)
Sensing responder identifiers (Sensing Responder IDs)
Sensing responder role bitmap (Sensing Responder Role Bitmap)
1
1
1
1
0 or n*6
0 or variable
0 or variable
Bits (Bits):
SBP request (SBP Request)
SBP procedure expiry exponent (SBP Procedure Expiry Exponent)
Sensing responder (Sensing Responder)
Number of sensing responders (Number Of Sensing Responders)
Mandatory number of responders (Mandatory Number Of Responders)
Preferred responder list (Preferred Responder List)
Number of preferred responders (Number Of Preferred Responders)
Mandatory preferred responder (Mandatory Preferred Responder)
Preferred responder role bitmap present (Preferred Responder Role Bitmap Present)
Mobility indication request (Mobility indication request)
Mobility report (Mobility report)
Mobility termination (Mobility termination)
Reserved (reserved)
1
4
1
4
1
1
4
1
1
1
1
1
2

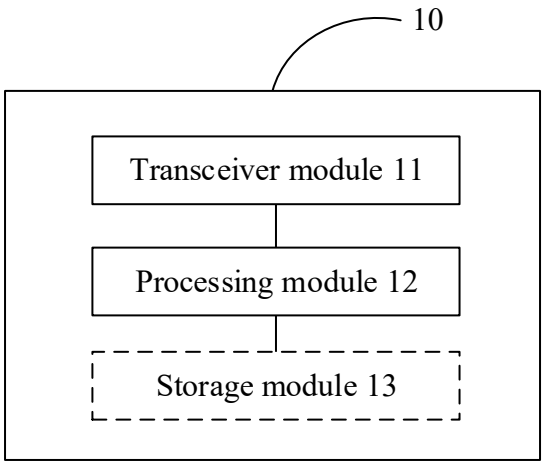
[FIG. 29]


SBP initiator
SBP responder
S2910: SBP request frame
S2920: Determine a behavior of a sensing responder in a mobility status based on an algorithm adjustment capability of the SBP initiator
S2930: Determine a behavior of the SBP responder in a mobility status based on the algorithm adjustment capability of the SBP initiator

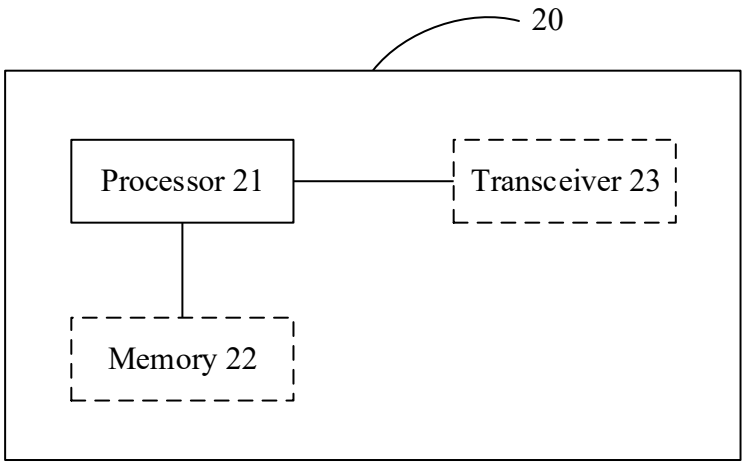
[FIG. 30]


Octets (Octets):
Category (Category)
Public action (Public Action)
Dialog token (Dialog Token)
SBP parameters element (SBP Parameters element)
Sensing measurement parameters element (Sensing Measurement Parameters element)
ISTA availability window element (ISTA Availability Window element)
1
1
1
Variable (variable)
Variable (variable)
Variable (variable)
Octets (Octets):
Element ID (element ID)
Length (Length)
Element ID extension (Element ID Extension)
SBP parameters control (SBP Parameters Control)
Sensing responder addresses (Sensing Responder Addresses)
Sensing responder identifiers (Sensing Responder IDs)
Sensing responder role bitmap (Sensing Responder Role Bitmap)
1
1
1
1
0 or n*6
0 or variable
0 or variable
Bits (Bits):
SBP request (SBP Request)
SBP procedure expiry exponent (SBP Procedure Expiry Exponent)
Sensing responder (Sensing Responder)
Number of sensing responders (Number Of Sensing Responders)
Mandatory number of responders (Mandatory Number Of Responders)
Preferred responder list (Preferred Responder List)
Number of preferred responders (Number Of Preferred Responders)
Mandatory preferred responder (Mandatory Preferred Responder)
Preferred responder role bitmap present (Preferred Responder Role Bitmap Present)
Mobility capabilities indication (Mobility capabilities indication)
Reserved (Reserved)
1
4
1
4
1
1
4
1
1
2
3

[FIG. 31]




[FIG. 32]




[FIG. 33]

